REPORT RESUMES

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CORRESPONDENCE INSTRUCTION IN ETHIOPIA, KENYA, TANZANIA, MALAWI, ZAMBIA, AND UGANDA--EXPERIENCES, NEEDS, AND INTEREST.

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THIS REPORT ON THE SALIENT FEATURES AND CONCERNS OF CORRESPONDENCE INSTRUCTION IN ETHIOPIA, KENYA, TANZANIA, MALAWI, ZAMBIA, AND UGANDA--(1) DISCUSSES ADVANTAGES, DISADVANTAGES, AND REQUIREMENTS OF THE CORRESPONDENCE METHOD IN AN AFRICAN CONTEXT, (2) SURVEYS CONDITIONS AND FACILITIES (POSTAL SERVICES, ROADS, INSTRUCTIONAL RADIO AND TELEVISION, CORRESPONDENCE SCHOOLS AND COLLEGES, AND RESOURCES FOR PRODUCING INSTRUCTIONAL MATERIALS), (3) SUGGESTS NATIONAL TASKS FOR CORRESPONDENCE TEACHING, AND (4) ASSESSES INTEREST IN A PROPOSED 1967 CORRESPONDENCE INSTRUCTION SEMINAR. TEACHER TRAINING AND UPGRADING, PREPARATION OF CORRESPONDENCE EDUCATORS, MASS EDUCATION OF UNEMPLOYED PRIMARY SCHOOL DROPOUTS, INSERVICE MEDICAL TRAINING (FOR EXAMPLE, FOR THE ETHIO-SWEDISH PEDIATRIC CLINIC), IMPROVEMENT OF TEACHING METHODS BY COMBINING CORRESPONDENCE COURSES WITH CLASSROOM SETTINGS, AND INCULCATION OF STUDY SKILLS AND HABITS FOR LIFELONG LEARNING, ARE DISCUSSED AS A PART OF THE URGENT MANPOWER TRAINING NEEDS THROUGHOUT AFRICA. PROBLEMS AND ISSUES SUCH AS LANGUAGE (AS IN ETHIOPIA AND MALAWI) AND GOVERNMENTAL VERSUS PRIVATE COURSES, MAJOR ORGANIZATIONS SUCH AS THE CORRESPONDENCE COURSE UNIT (ZAMBIA MINISTRY OF EDUCATION), OUTSTANDING EFFORTS SUCH AS THE MALAWI CORRESPONDENCE COLLEGE RADIO CLASSROOM, AND RECOMMENDATIONS ON PARTICIPATION IN THE SEMINAR, ARE STRESSED. APPENDIXES ON OPERATING EXPENSES AND PROGRAM PLANNING ARE INCLUDED. (LY)

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Correspondence Instruction in Ethiopia, Kenya, Tanzania, Malawi, Zambia, and Uganda. Experiences, Needs, and Interest.

AC 000 842

A Report to the Dag Hammarskjöld Foundation.

DAG HAMMARSKJÖLD FOUNDATION

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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A Report to the Dag Hammarskjöld Foundation.

Table of Contents

Foreword p. 5

Terms of Reference " 7

1. Introduction

1.1. Definitions " 9

1.2. Correspondence Instruction and Modern Society-Correspondence Education in Africa " 12

1.3. Advantages of Correspondence Instruction " 18

1.4. Shortcomings of Correspondence Instruction " 24

1.5. Pre-requisites of Correspondence Instruction " 25

2. General Educational Needs in Eastern and Central Africa

2.1. Introductory " 31

2.2. Educational Objectives and Africanization " 32

2.3. Learning for Transition " 35

2.4. Literacy Training " 37

2.5. Teacher Training " 39

2.6. Teaching Methods " 41

2.7. Unemployed Primary School Leavers " 42

3. Ethiopia

3.1. Correspondence Instruction in Ethiopia " 45

3.2. Adult Education in Ethiopia - Activities and some Needs " 47

3.3. Possible Uses of Correspondence Instruction in Ethiopia " 49

3.4. Deterrents to Correspondence Instruction in Ethiopia " 52

3.5. Ethiopian Interest in Correspondence Education " 54

3.6. Proposed Seminar on Correspondence Education - Recommendations " 55

3.7. Outline of a Pilot Project - Recommendations " 56

4. Kenya

4.1. Correspondence Education in Kenya - Experiences and Plans " 60

4.2. Kenyan Interest in the Proposed Seminar - Recommendations " 65

4.3. Correspondence Education for Upgrading School Teachers to University Level - Recommendations " 66

4.4. Other Correspondence Education Requirements in Kenya - Recommendations " 68

5. Tanzania

5.1. The Present Role of Correspondence Education in Tanzania p. 70
5.2. Conditions for Correspondence Education in Tanzania " 74
5.3. Educational Problems and Needs " 75
5.4. Adult Education in Tanzania - a Brief Outline " 77
5.5. Interest in Correspondence Education " 80
5.6. Proposed Seminar - Recommendations " 81
5.7. Outline of a Correspondence Education Project - Recommendations " 83

6. Malawi

6.1. Correspondence Education in Malawi " 89
6.2. Proposed Seminar on Correspondence Instruction - Recommendations " 95

7. Zambia

7.1. Correspondence Instruction in Zambia " 96
7.2. Experiences, Plans, and Problems of Zambian Correspondence Education " 99
7.3. Proposed Seminar on Correspondence Education - Recommendations " 103
7.4. Aid to Correspondence Education in Zambia - Recommendations " 104

8. Uganda

8.1. Potential for Correspondence Education in Uganda " 105
8.2. Adult Education in Uganda - a Brief Outline " 106
8.3. Educational Problems and Needs in Uganda " 107
8.4. Correspondence Education in Uganda - Experiences and Plans " 109
8.5. Proposed Seminar on Correspondence Education - Recommendations " 112
8.6. Possible Aid Projects " 113
9. General Recommendations " 114
10. Summary of Report " 115
Appendix 1 " 129
Appendix 2 " 132
Appendix 3 " 134
Appendix 4 " 136
Appendix 5 " 137

Foreword

This report was originally intended to be comparatively short, centred on recommendations, and written in Swedish only. So many organizations and institutions outside Sweden have shown an interest in the report, however, that a completely different approach has been called for.

Correspondence education in Africa is still in many respects a virgin field. Commercial colleges have been established in African countries for many years, it is true, but their activities are generally not geared to the development needs of the African states, and with one or two exceptions they are not an integral part of the national educational systems in modern Africa. But there is an increasing awareness of correspondence instruction as a possible means of accelerating the economical and educational growth of African society. At the same time, many educationists are asking themselves what rôle correspondence tuition should be called upon to play in Africa, what its advantages are, and what its weaknesses.

The general, introductory two chapters of this report have therefore been devoted mainly to a short discussion of the characteristics of education by correspondence and of its possibilities in an African context. In a very tentative and sketchy way, these chapters outline a conception or "philosophy" of correspondence education which is implicit in the report proper. They are, broadly speaking, part of the terms of reference of the report.

The report itself, the chapters dealing with individual countries, has been given a partly descriptive character, because of the lack of and stated need for a collected account of what has hitherto been attempted in the countries dealt with in the report.

All information and recommendations given in following pages are based on talks held with the persons listed in the report, without whose generous and patient help it could not have been prepared. I wish to record my indebtedness and gratitude to them, and also to Dr. Homer Kempfer, US AID, for the advice, assistance, and encouragement they have given. Not least the material they have placed at my disposal has been of very great assistance and value.

My debt of gratitude is also heavy to the staff of the Royal Swedish Embassies in Addis Ababa, Nairobi, and Dar-es-Salaam for all the help they have given both before and during my visit in Africa.

All views, recommendations, and conclusions expressed in the report are those of the rapporteur and are not necessarily shared by the Dag Hammarskjöld Foundation.

Stockholm, July 31st, 1966

/L-O. Edström/

Terms of Reference

The Dag Hammarskjöld Foundation, Stockholm, Sweden, early in 1966 decided to investigate the possibility of holding, some time between May 15th and September 15th 1967, a seminar on "The Use of Correspondence Instruction in Adult Education. Means, Methods, and Possibilities". The seminar was preliminarily planned to be held in the Foundation's Centre in Uppsala, and to it would be invited participants from Ethiopia and the independant, English-speaking states of East and Central Africa.

Before any definite decision could be made about the seminar, the interest and need for the proposed seminar would have to be ascertained. It also became apparent that very little information was available regarding the actual or planned rôle of correspondence instruction in the countries concerned. Such information would have to be gathered, and material which could be used for a seminar collected.

If the Foundation's intentions were to be realized, the question of aid projects in the field of correspondence education also had to be raised.

As a first step, the Foundation therefore assigned Dr. Lars-Olof Edström, Hermods-NKI, to undertake an exploratory mission to Ethiopia, Kenya, Tanzania, Malawi, Zambia, and Uganda. The following instructions formed the basis of the mission and of the subsequent report:

"1. To study and collect information on the rôle of correspondence instruction in Ethiopia, Kenya, Tanzania, Malawi, Zambia, and Uganda. In this connection it is essential to define the fundamental aims and means of correspondence instruction in the countries referred to and to assess experiences gained.

2. To survey the physical conditions for correspondence instruction in developing countries, such as the postal service and other communications, the facilities at the disposal of correspondence students and the technical resources for the production of study material.

3. To inform about and stimulate the interest for non-commercial correspondence instruction as a means to promote efficient and rational solutions to different types of educational problems.

4. To contact authorities, institutions and individuals responsible for education, especially adult education and correspondence instruction, in the countries referred to for a free

discussion of possible tasks for correspondence instruction within the limits of the needs and priorities of the country concerned.

5. To investigate opportunities for specific assistance efforts in the field of correspondence instruction.

6. To ascertain the need for and interest in a seminar on "The Use of Correspondence Instruction in Adult Education. Means, Methods and Possibilities". Provided that the proposed seminar arouses genuine interest, discussions should also be held concerning the aims of such a seminar and the educational background of potential participants.

7. To pay special attention in all discussions to the rôle and possibilities of correspondence instruction in basic and continuing teacher training.

8. To prepare the proposed seminar on "The Use of Correspondence Instruction in Adult Education. Means, Methods and Possibilities" through

a) discussions concerning the content and syllabus of the seminar,

b) collection of study material for the seminar. This material should comprise i.a. representative examples of correspondence courses so far used in the region, as well as information on relevant and frequent administrative, technical or educational problems.

9. To prepare the recruitment of a Direction of Studies for the seminar on "The Use of Correspondence Instruction in Adult Education. Means, Methods and Possibilities".

10. To prepare the recruitment of participants for the seminar on "The Use of Correspondence Instruction in Adult Education. Means, Methods and Possibilities".

Dr. Edström's exploratory mission will extend from the end of April until the beginning of July, 1966. A report should be submitted by August 1, 1966."

1. Introduction

1.1. Definitions

1.1.1.1. Correspondence instruction is a teaching method that combines self-study with regular periods of two-way, individual communication between student and teacher. This flow of information and exchange of ideas student-tutor and tutor-student - what may be called an "educational dialogue" - is a characteristic feature of correspondence instruction. Without it, teaching by correspondence would be reduced to a simple dissemination of knowledge. Again, it is important that something more than just a simple feedback student-tutor occurs; two-way communication is an indispensible element of correspondence education.

1.1.1.2. Essentially, correspondence tuition is a vehicle of mass education. It is uneconomical in terms of both manpower and finance to launch a correspondence scheme for a very limited amount of students only. Not least the comparatively large capital investments in course production and equipment necessitate as broad a recruitment base for a correspondence education system as circumstances will allow. In this respect correspondence instruction resembles the education given by mass media such as radio and TV.

Yet correspondence instruction at the same time supplies a channel for individual contact; a form of "private tutor" is built into the system. At its best, it combines the economy of mass education with many of the good qualities of private coaching.

1.1.2. Self-study is a basic concept of correspondence instruction. It implies that the student in principle works on his own. He does not have the constant help of a teacher as an intermediary source of knowledge.

Self-study is nothing peculiar to correspondence instruction; in many universities, particularly in Europe, self-study is extensively practised. But used in a correspondence instruction context the term is generally understood to have further qualifications. The student works independantly, but he is also using material specifically prepared so as to facilitate self-study.

1.1.3. Self-instructional material is educational material so prepared that the process of learning is facilitated and made effective by the methodical application of modern educational and psychological principles and theories. In this it resembles programmed instruction. Indeed, the term self-instructional material is often thought of as a synonym to "conventional" programmed materials. This is, however, too narrow a view. Modern, competently prepared correspondence courses used without the sending in of assignments to be corrected are quite obviously, together with for instance programmes, a separate subgroup of self-instructional material. But if programming is thought of more as a method or an educational technology than as the preparation of a certain type of material, it is obvious that there is an affinity between programming and the production of correspondence courses. Any modern self-instructional material must to some extent be "programmed" to be an effective, self-instructional instrument of learning.

1.1.4. Supervised correspondence study is a special form of correspondence instruction which implies that the student studies by correspondence under the guidance of an instructor. The task of such an instructor is not to teach in the popular sense of the word; that is to say he does not as a rule impart knowledge or teach skills. This is done by the correspondence course. But the supervisor is to help the students to organize their work and to develop effective methods of study and reading techniques. It is also very important that he gives particular attention to the problems of student motivation; students whose initial incentive to study is weak or whose effort is unsustained, for instance children, generally need an active and purposeful "incentive creator" and mentor, if they are to benefit from correspondence study.

1.1.5. There are two main types of correspondence course: the self-contained course, and the study-guide. The self-contained course is, as its name indicates, a correspondence course that can be studied without for instance a text-book. It has been specially written for correspondence use and incorporates all the relevant information generally given in text-books.

The study-guide, on the other hand, supplements and is based on a text-book or hand book written for use in a classroom. The study-guide augments the book, supplies self-check exercises, and provides questions and problems, the answers to which are to be sent in to a correspondence organization for marking by a tutor.

1.1.6.1. Group study by correspondence is a combination of correspondence instruction and the study circle or group study method. This development of teaching by correspondence is characteristic of Sweden, where it has been extensively used since the early 1920's, but it is also found elsewhere.

The students, generally five to ten in number, form a group which meets regularly, usually once a week. Either the group itself elects one of its members as leader - which is the most common procedure - or it may apply for a leader from "outside". Special short training courses for study circle leaders are sometimes held.

1.1.6.2. At group meetings the members discuss the content of the correspondence lessons, and the corrected answers to assigments are gone through. Each group member is assumed to have prepared himself for the meeting by studying the correspondence lesson in advance.

There are three common variations of the basic pattern:

1) After the group has dispersed, each member sends in his own individual answers to assignments for marking. by the correspondence organization.

2) The group agrees on a common set of answers to send in for marking.

3) The leader of the group (if qualified) himself corrects and comments on the work done by the group members, either individually or collectively.

Either of these ways of studying can be complemented by visits from lecturers or teachers who come to the group and hold face-to-face classes or tutorial type meetings.

This is a practical means of "humanizing" correspondence instruction and adding to it a socially and educationally significant dimension of discussion, student cooperation and group dynamics.

1.2. Correspondence Instruction and Modern Society - Correspondence Education in Africa

1.2.1. Correspondence instruction in its present form has been made possible by the swift developments that have taken place in the fields of technology and communications since the end of the nineteenth century. The facilities for economically reproducing and swiftly spreading information are major technical determinants of education by correspondence; the method requires a comparatively well developed infrastructure.

Generally, too, correspondence instruction has become popular in areas which are sparsely inhabited, for instance in rural societies. But this rather self-evident reason for the growth of correspondence instruction in certain parts of the world is not exhaustive. It does not explain why correspondence courses have been in rapidly increasing demand in for instance Sweden during a period which has been characterized by a swift concentration and urbanization of the population. Nor does it give a plausible reason for the post World War II success of correspondence education in a densely populated country like Japan. Neither does it account for the apparent special attraction correspondence courses have for the adult sections of society in the countries where teaching by correspondence is firmly established, for instance USA, Canada, Australia, New Zealand, Japan, Sweden, and Norway.

The rapid expansion of teaching by correspondence - even despite commercial misuse in many parts of the world - indicates that something in the structure of modern society itself may well be one of the driving forces behind the emergence and growth of the method.

It is a significant fact that education by correspondence generally holds a strong position in societies that are in a rapid state of transition, and where change is accepted and even actively encouraged by government or accepted pace-makers. This is no coincidence.

The passage from a rural to an industrial economy or from a static and traditional society to a more dynamic pattern of life cannot but have a profound influence on the educational system of the community in which it takes place; the structure of education in any society closely mirrors the conscious or unconscious ideologies, social patterns and economic realities upon which that society is based. In our own time of flux, when whole new groups of trades and vocations spring up and others die out or are radically altered within a few decades, the individual must as an adult be able to adjust himself to an irrevocably changing, socially and economically fluid environment. This process of constant adaptation means acquiring new knowledge and new skills. But the traditional school systems are more often than not based on the assumption that education is for childhood and youth. They are fundamentally static in outlook. Their implication is that they are to give the youngest generations knowledge and skills which will be sufficient for the individual during his life span. In a technically, socially and economically more rigid society this basic assumption was well-founded. But once the element of change is strong, once the obsolescence of knowledge is a major reality - then the notion of a youth education sufficient for life is fundamentally unsound. For all their very great past merits and achievements entirely youth centred educational systems are today fast becoming anomalies. The realities of modern society are other than those an extremely traditional educational structure presupposes. Then, too,particularly in many developing societies, but elsewhere as well, the conventional educational systems create a group who by the very process of their education have lost touch with the community they once belonged to; there is all over the world a very definite need to associate more closely education and the life of society in general. Hardly anywhere is this more deeply felt than in the developing new states.

The clash between the new educational needs of this century and timehonoured educational philosophies and methods has in most countries led to a crisis which has shaken the very foundations of the established school systems. Sometimes the presence of this state of crisis is admitted and accepted, sometimes it is not. Very seldom, however, have educational reforms led to more than modifications of the hitherto prevailing structures. The underlying pattern is often enough in general outline much the same as before. It is symptomatic that adult education - in theory recognized as vitally important to a modern state - is in practise generally regarded as a kind of appendix to the existing youth school systems and treated as such. Adult education is not seldom allotted the rôle of a remedial adjunct to the main forms of education, i.e. youth education. It is expected to provide complementary or compensatory educational facilities for people who did not have opportunities for education in their childhood or youth. Methods, curricula and objectives tend to be transferred with few amendments from youth education to adult education, even when the autonomous position of adult education is nominally recognized.

But the educational problems of the adult - enmeshed as he is in a network of family ties, obligations as a citizen and responsibilities as a working member of the community - differ from those of youth. Among his needs is a flexible means of gaining new knowledge and skills, one which will allow him to study at a time and place of his own choosing, without breaking off his other activities for any greater length of time. Unlike the youth, his rôle as student is only one of many for him, and he cannot devote himself to it to the exclusion of the others; he needs to integrate freely his studies with his everyday working and social activities. The traditional pattern of education, however, provides inadequate solutions to this and several other crucial problems of modern adult education. The sharp upswing of correspondence tuition during the past half century should be seen in this light. Correspondence education has held out to many an opportunity of getting further education in a way suited to the conditions imposed by modern society.

However, it must not be forgotten that many other factors also have contributed to the widespread use of correspondence courses in many parts of the world: for instance lack of qualified teachers and/or teaching facilities; and social, political or economic restrictions governing the intake of students into regular schools. Nor should the inherent weaknesses and shortcomings of correspondence education be ignored; they will be dealt with elsewhere in this report. But the essential features of correspondence education would seem to make it well equipped to help solve some of the educational problems of the world of today. It is one of the educational tools of a society in transition.

1.2.2.1. In a developing African community the rôle of correspondence instruction is not necessarily the same as in for instance Western

Europe.

Education by correspondence should comply to certain basic requirements in Africa.

In itself, education by correspondence is nothing new to the continent. A great many Africans are or have been enrolled as students with correspondence colleges, generally based overseas. But the existance of these large numbers of African correspondence students does not mean that there exists an African correspondence education.

The correspondence education available in most of Africa is essentially American or European in outlook and aims. Even when modifications have been made to suit African conditions, it generally represents a foreign element. It is not an organic part of the African country's educational system, and it is not geared to existing development needs. Particularly the latter is an extremly serious matter.

1.2.2.2. In an African state, a correspondence education programme must be so designed that it has an immediate impact on the country's social and economical development. Its aim must be to fill the necessary qualified manpower requirements in areas of vital importance to the country. This "African" correspondence education must be intimately linked with the everyday work and life of the student. The courses must be written in Africa, preferably by Africans, aimed at specific middle level groups of students important to development and in general combined with some specific vocational, commercial or technical training. This would guarantee a balance between theory and practice and thus in this respect contrast with the very "academic" and very strongly theoretically biased correspondence education now available in Africa.

Africa of today has a great need for "practical", indigenous correspondence courses of this kind, aimed primarily at the middle level echelon of students (administrative personnel, office staff, etc.).

As a general rule, the manpower situation is of paramount importance in defining possible uses of correspondence education in an African state. Any African correspondence education project must actively assist in reducing the manpower shortage. It should therefore not feel itself bound by conventional or academic standards. Manpower needs in the new African states are not always met by expanding the output of the present school systems; many opportunities for training in essential skills are at present inadequately provided or not at all afforded by the existing schools (cf. also 2.2.2.). It is in the lacunae of the present educational systems that correspondence education has perhaps its greatest potential value for Africa. In other words, it should not necessarily turn out possibly unemployed, academically trained school leavers but more skilled secretaries, accountants, draughtsmen, mechanics, tradesmen and other professionals, with a view to speeding up the process of Africanization.

The raison d'être for African government participation in the field of correspondence education must therefore not necessarily be competition with the existing commercial organizations. It must be the creation of a different system of correspondence education, one that is much less abstract and entirely indigenous, an education distinctly African in methods, objectives, and content - subservient to the development needs of modern African society.

1.2.2.3. The structure of the educational pyramid in the countries dealt with in this report gives the explanation for the potential importance and urgency of correspondence education for the region. The very broad base and sharp apex of the educational pyramid reveal a fundamental imbalance, a surplus of underqualified manpower and a corresponding dearth of skilled and specialized manpower, resulting in mounting numbers of unemployed school leavers, at the same time as the economy is suffering ever more acutely from the inadequacy of the indigenous high-level manpower supply.

This is a problem which the already strained "conventional" systems of secondary and further education cannot cope with, partly because of the scarcity of resources, partly because of the very large numbers involved. Literally hundreds of thousands of persons in almost every country of the region either cannot obtain secondary education or are drop-outs from secondary schools owing, among other things, to the uneven quality of teaching on the primary level. Teacher upgrading and a radical expansion of educational facilities on the secondary and further levels are therefore interdependant and are called for. They are two of the most important keys to a sound political, social, and economic development in the 1970's; few tasks could be more vital to the countries concerned than to solve these two problems.

The realities of the situation call for a method of mass education that is relatively effective and economical in terms of manpower and finance. One of the very few feasible answers to this is a system of correspondence education supplemented with radio broadcasts, group study, residential courses, itinerant tutors and other face-to-face teaching facilities when and where possible. Traditional educational approaches, transferred from a European or American context, where the pre-requisites and conditions are completely different, do not have the same relevance to the crucial problems of economical mass education and in-service training (not least of teachers) that are facing most of Africa today. Therefore, although correspondence education by no means is problem-free itself or the answer before others to educational needs, it should be able to play a not insignificant rôle in the development of the new Africa. The determinants of the educational situation are such that a decision to investigate the possibilities of correspondence education on a national level is a logical and realistic conclusion to draw from both the educational, economical, social, and not least political premises. In terms of national development planning in Africa correspondence education, in the sense outlined here, is not a luxury or a thing of very limited interest only; it can very well have a very direct influence and impact on the welfare and future of the African nations.

1.3. Advantages of Correspondence Instruction

1.3.1. Many people still look upon correspondence tuition as an inferior form of education. This bias against tuition by correspondence is naturally strongest in countries where the idea of integrating correspondence instruction into the traditional sytem of education is relatively new, and where a conservative academic tradition excercises a strong influence. Even in many of the places where correspondence instruction is now recognized, very few concessions were originally made to it; it was barely accepted as an emergency solution to pressing problems, for instance a critical lack of teachers or a sparse distribution of population in some area. The consequences of this reasoning would be that, if the quality of the teaching is to be upheld, correspondence programmes should be discontinued as soon as possible, in favour of conventional teacherled classes.

However, this view has been considerably modified in the past twenty to thirty years. This is due partly to the great success of many correspondence instruction schemes, partly too, to the fact that the efficiency of traditional teaching methods - previously taken much for granted - has on good grounds been questioned. Much more serious thought has therefore been given to other means of instruction, among them correspondence education, which is now generally considered to compare favourably, in many respects, with more conventional ways of teaching.

1.3.2. Correspondence instruction offers both student and teacher a relatively large degree of freedom. They are more independent of each other than if they were associated in a conventional student-teacher relationship. This holdsout great advantages particularly for the student, who (within limits) can study when and where he pleases. People far from schools are thereby given an opportunity to study, and bread-winners are able to support themselves and their families by working while studying. The social and economical significance of this is apparent and need not be stressed; it should, however, be held in mind that this system of study is basically different from most of those now widely in use.

The one, correspondence education, is what may be termed as a socially "open" educational situation, characterized by a comparatively close interaction between the different functions of the individual in society. The correspondence student is not so isolated from the rest of the community as is for instance the student in a boarding school or a campus type university. This contact with everyday life can and should be mobilized by the educator to assist the educational process; on-the-job training and upgrading schemes are especially well suited to correspondence instruction projects.

Again, a proper balance can thus be struck between theory and practice, eliminating the risk that theory and abstraction take the upper hand - a risk which is undeniably very much present in most correspondence education projects.

1.3.3. Whether correspondence courses are used in conjunction with radio broadcasts and/or ETV or not: correspondence instruction is essentially a form of mass education; a single teacher or group of teachers is able to reach audiences of literally thousands and tens of thousands of students.

The consequences of this for both the individual and society are many: a small cadre of subject experts and skilled teachers can be rationally used for teaching students in even very remote areas. The good teacher has the personal satisfaction of knowing that he can count on having many times the amount of students that would otherwise be possible; the individual student can benefit from the best instruction that is to be had, even if he is living in an isolated region. Both in terms of manpower development, economy and not least social justice, correspondence education can thus become a great educational asset to the country that adopts it.

1.3.4. Many consider as one of the chief advantages of education by correspondence that it allows the student to pace himself. (This is a special aspect of the greater freedom for the correspondence student dealt with in 1.3.2.) Free pacing is, however, not in itself a necessary element of correspondence instruction, only a possiblity; there are many examples of correspondence instruction programmes where the idea of free pacing has been rejected.

Whether free pacing should be allowed or not, naturally very much depends on the objectives of the educational scheme in which correspondence instruction is to be used. However, restrictions in this respect are not to be generally recommended. They should be exceptions to the rule only. Particularly many adults probably do better when allowed to pace themselves. But persons unused to working on their own, and students whose incentives for study are not strong, may, however, require a certain degree of pacing. This can no doubt be safely said of children as well. It is possible to provide for such pacing by for instance combining the correspondence instruction with radio broadcasts and/or ETV, the programmes being linked with the correspondence lessons and serving as pace-makers.

The advantages of free pacing are several. If free pacing is permitted, each student can complete a subject in his own time; individual differences in speed of comprehension and in study ability are tolerated. Generally, this is not so. Able students are often held back by for instance class teaching, when the assumed ability of the average student determines the pace and to a certain degree the content and level of instruction. On the other hand, slow students, those who lag behind the average, are easily disheartened by conventional methods and often give up. There exists a tradition of setting a time limit just as much as educational requirements as a major educational objective. This is probably to blame for the suspicion still lingering in many quarters against an education that is not in some way paced. The tendency is to look upon the completion by some students of for instance a four year course in two years as something either almost immoral or from a quality point of view suspect. Other students in a conventional, highly competitive and selective time system are graded out at an early stage or harassed to weak results through a course which they might have done well enough in, provided they had been given the longer time they require. The educational waste that is a consequence of this, need not be entered upon here.

1.3.5. One of the characteristics of the correspondence course is that the subject matter is divided into small units, which often constitute small booklets of their own. Thanks to this, there is the possiblity, in most cases, of excluding from a course or adding to it standard and/or special lessons or units, so that the "new" course will meet the individual needs of the student.

Remedial lessons can for instance be sent to a student when it is apparent from his answers that he has not grasped a particular type of problem or has a basic deficiency in some subject area. (Remedial correspondence teaching of this nature has been successfully carried out in Sweden).

Given the resources, it has been shown that correspondence courses can also be so prepared, that every unit or lesson can be taken on say three different levels: one for the advanced student, one for the average and one for the weak student. The student's level can be decided for every unit by a diagnostic test administered before the unit. This makes it theoretically possible for the student to change level or stream after every unit which offers a very large range indeed of individual paths or streams. The subject matter and the objectives are in principle the same on all three levels but is treated more or less comprehensively, more or less theoretically and in more or less simple language. (In Sweden, where this kind of streaming has been attempted, it is not undertaken for meritocratic reasons but in order to give every student, on his own level, just the education his individual qualifications and level call for. From this point of view, children who fail at school represent not a failure of the student but of the school system and the teachers.)

This very high degree of flexibility and the possibility of individualization - and a consequent democratization of the educational system at a comparatively small cost must be considered as one of the greatest assets of education by correspondence.

1.3.6. Correspondence instruction can, if the course material is competently prepared, be highly effective, sometimes considerably more effective than the tuition given by an average teacher to a class. This follows from the conditions under which correspondence lessons can be produced. They can be written by the very best subject matter specialists and educationists available - a teamwork is generally to be recommended - using basically the methodology and "philosophy" of programmed instruction, and the course can be tested on a sample group of the target population, validated and revised before being produced. Obviously, even a very good, inspired teacher cannot prepare himself for every lesson to this extent. It must be stressed, however, that a correspondence course of this kind does little more than impart and guarantee certain knowledge or skills. The development of the student's ability to function constructively in a social context, for instance, would have to be furthered by the provision in the training scheme as a whole of some other, complementary form of tuition or educational activity.

1.3.7. Activity methods are usually difficult to introduce in the practice of conventional, teacher-led classroom instruction. Most teachers still feel guilty, if they leave a classroom where they themselves have not been the most active person in the room. This is a result of the very firm grip the traditional lecture - essentially medieval in method and dating back to times when books were rarities - still has onmodern education.

But the modern correspondence course, just like other forms of self-instructional material, relies very much on activity methods; the student proceeds by small steps, encountering self-check excercises as he goes along. It is a means of instruction that demands an active student response.

1.3.8. Correspondence instruction is a very exacting form of tuition. It requires a good deal of effort on the part of the student. From one point of view, this is a drawback; from another it is an advantage. Study by correspondence is also very much a training in self-discipline, endurance and methodical habits. The student has to learn to plan his work and use his time efficiently, if he is to succeed in his studies.

One of the reasons for the high rate of drop-outs in most correspondence instruction programmes is most probably the inability of many students to qualify in this respect. Too much is taken for granted by the correspondence educator, who very seldom makes adequate provisions for helping the inexperienced correspondence student to acquire gradually the strength of character and moral capacity that is expected of him. The student needs a great deal of individual guidance and help. He must learn how to organize his studies, he must be contacted when he seems to be falling behind, and he must learn how to form habits that will assist him in his studies.

Even given such help, however, there is bound to be a group of correspondence students who will fail to put forward the minimum of sustained effort that correspondence education presupposes. But this inevitable percentage of drop-outs does not necessarily lower the value of the method as such; the successful correspondence student is a valuable asset to any society by virtue of the very fact that he has studied in this way, quite apart from whatever factual knowledge or skill he may have gained. He has as a sort of by-product of his education been trained in some of the qualities essential to leaders and nation-builders: he must have a sense of responsibility; an ability to organize; perseverance and tenacity of purpose; the ability to make decisions and work towards long-term goals.

1.3.9. In an era of sweeping changes, educational and others, necessary curriculum reforms are often held up by the human element of conservatism among teachers. It is the exceptional teacher who remains an experimentor and innovator all his life. Generally, a teacher who has been in the profession long enough to have gained a profile of his own, is unwilling to embark upon something completely new. This is due partly to convenience, partly to self-indoctrination and identification with the state of things during his first teaching years. Thus, reforms affecting subject content and teaching methods, although carried out on paper, normally take a generation of teachers to bring about in practice; the existing cadre of teachers always to some extent petrifies obsolete educational ideals, methods and goals.

This retarding force can, however, be combated by the use of correspondence instruction; the teacher can be partly by-stepped, which generally means a swifter implemenation of new policies than if conventional methods alone were being used.

1.4. Shortcomings of Correspondence Instruction

1.4.1. Correspondence instruction demands a great deal of the individual student in the way of self-discipline, perseverance and proper methods of study. Particularly the latter are of paramount importance. Correspondence education is therefore a "difficult" way of studying. It is a fundamental error to plan any correspondence project without taking into consideration the average student's need for instruction in effective reading techniques and study methods.

1.4.2. The conventional correspondence course puts the verbally non-gifted student at a disadvantage. Many people have a keen enough intelligence but a limited ability for learning through books and expressing themselves in writing.

1.4.3. Correspondence instruction (= individual correspondence study) has often been called an "inhuman" method of teaching, lacking in the stimulating personal contact between teacher and student, and in social intercourse between students. This calls for a supplementation by group activity and/or tutorial type teaching, where discussion is encouraged.

1.4.4. Correspondence instruction cannot by any means entirely replace the teacher in all subjects and under all conditions. Laborative subjects, for instance, are poorly and ineffectively handled by correspondence courses alone. A minimum requirement is, for these subjects, a follow-up laboratory course and/or a small laboraty kit lent to the student, so that he can perform simple, safe experiments at home. Even so, the methodological weakness of not being able to centre the instruction given on experiments and demonstrations is not fully compensated.

Nor can modern language teaching be altogether done by correspondence. The ability to understand and correctly use the spoken language has to be trained in some other way: with the help of language laboratory materials and/or a qualified teacher.

1.5. Pre-requisites of Correspondence Instruction

1.5.1. Correspondence instruction in Europe, North America, Australia, New Zealand and Japan has emerged in a technically and economically relatively well developed society. It is perhaps on the whole more dependant than any other widely used form of education on the infrastructure of the community in which it is introduced. The road, rail and airline network, the postal system, in short the facilities for communication in the widest sense of the word are of decisive importance to the success or failure of teaching by correspondence. This is a truism. And yet developments have shown that there is sometimes a tendency to disregard or take for granted the infrastructural and other requirements of this means of instruction; perhaps this is because considerations of this kind are not so relevant to conventional teaching methods. In a developing country such an oversight could have grave consequences, because it would divert a part of the national effort into abortive channels. It could thus mean a deterioration rather than an amelioration of the educational situation.

1.5.2.1. A good and relatively fine-meshed road network is probably just as important to a correspondence instruction programme as a reliable postal service. Where the roads allow it, there are generally regular bus services, even in areas where the general rate of literacy has not been conducive to the development or efficiency of postal facilities. In some parts of for instance Africa the bus companies have agreed to handle minor transports, and assignments and communications could be sent between a correspondence centre and its students in this way, if the postal service is inferior. Regular air services can also be used.

1.5.2.2. The turnover time for communications between the correspondence centre and the student must be as short as possible. This is not just an ordinary service requirement; the time the student has to wait influences the student's motivation and consequently his results. No research has been done that clearly shows what the minimum time limits are. In Europe the turnover rate varies from about five-six days to three weeks. African students enrolled in correspondence organisations overseas have to wait as much as three months for corrected answers to assignments and for answers to enquiries.

Of the two factors involved, the routines of the correspondence centre's administrative apparatus and the sending procedures, the internal routines, are within the control of the organization and thus susceptible to rationalization. The sending procedures, postal or others, are not. Therefore, it is here that certain minimum requirements should be upheld. If the despatch of communications from the student to a responsible correspondence centre, and vice versa generally takes considerably more than seven-eight days, it is very doubtful whether large scale operations should be contemplated. Some students can, however, be handled under such conditions, if the majority can expect better service.

In parts of the world where this is feasible, teaching by telephone has been practised in conjunction with correspondence instruction. This would, however, obviously be out of the question in a developing country.

1.5.3. A special aspect of the communications problem is that of language. Teaching in English, which is common on the secondary school level in the African countries dealt with in this report raises the problem of using a second language as a vehicle of written instruction. Oral instruction can be lengthier and more verbose, and can rely also on accompanying gestures, mimicry and modulations of the voice itself. An extensive use of written material almost always presents difficulties for the average student as well as demanding much of the course writer. If the written language used is not that spoken in the student's surroundings, the problem becomes considerably more serious. The language barrier is not insurmountable, but a language proficiency test is very definitely necessary as a part of a correspondence instruction programme in countries where many vernaculars are spoken and where perhaps two or more official languages are used.

1.5.4. The home environment of the correspondence student is very important in any country; the interaction between the student and his milieu has a profound influence on his studies. Teaching the student to understand this and, to a certain degree, to modify extraneous influences in order to achieve better results, must be given special attention. It is a part of the training in study methods so vital to correspondence tuition.

But in developing countries, where even tables, chairs and electric lightning may be luxuries, more is involved than a mere understanding and use of proper study methods. The total lack of elementary home study facilities in many developing countries can jeopardize the very idea of education by correspondence. If a correspondence student is to succeed, it must be posible for him to give at least some undisturbed time to study, either during the hours of daylight or after dark. Particularly, the student must be able to do written work reasonably effectively during this time; he is expected to study actively, with a pencil or a pen always at hand, for instance to make notes, do self-check exercises and underline key sentences.

1.5.5. In a well developed country with large resources of qualified manpower, there are generally a fair amount of skilled potential course writers and markers available. It need hardly be said, however, that in most developing countries, this is not so. Indeed, the acute shortage of high-level manpower constitutes one of the chief development problems in practically all of these countries, perhaps particularly in Africa. Indignous correspondence instruction would therefore in most developing countries be practically impossible without the understanding and whole-hearted cooperation of ministries, universities and other bodies. They would have to be called upon to release some of their staff for a short period of time or give them permission to act in their leisure time as correspondence course writers and/or markers.

Again, even a group of interested and well qualified course writers and markers would have to be trained in the techniques of writing correspondence courses and marking students' answers. Experience has shown that both these skills require a special technique that cannot be presupposed; long experience of conventional teachning or text-book writing is not in itself sufficient. Such training can and usually mainly is given on the job by already established correspondence instruction organizations. But if an entirely new correspondence programme is to be lanched, an elementary training of markers - and naturally also course writers - should precede the first operations of the organization. It would be a part of the preparatory phase.

1.5.6. The correspondence organization can either rely on independant printing establishments for the technical production of course materials, or can produce them itself. Both methods are practised in different parts of the world. If printing can be done swiftly, economically and well by an already existing printing organization, this should probably be recommended. Existing facilities and trained staff should be called upon wherever possible. Much seems to indicate, however, that the printing resources in many developing countries are heavily strained. This would mean that a correspondence organization in a developing country probably should set up its own printing department in order to keep time schedules and produce course material at a feasible cost.

In either case, the organizational solution adopted for the course production would have immediate consequences for the printing methods used. A comparatively small correspondence unit can obviously not do any letterprinting on its own. The cost would be prohibitive. The correspondence lessons would have to be printed on offset from typed originals. But the price that would have to be paid for this economically produced offset printed material would be limitations in the possibility of making pedagogical use of layouts and typography. Letter printed material - if imaginatively and competently edited and printed - has an educational dimension very seldom, if ever, found in a typed or mimeographed page. Letter printed material can not only help the student to acquire new knowledge more swiftly and effectively; it can also assist him in developing good study methods. The general importance of the printer's art for educational material is sometimes forgotten by teachers used to face to face methods, but it is part of the professional responsibility of correspondence educators to bear it in mind. That letter printing often is aesthetically more appealling is irrelevant in this context. It can be advocated on its purely functional and educational merits.

1.5.7.1. Few fields of education have suffered so heavily from commercialization and profiteering as correspondence instruction. In most parts of the world there have sprung up, besides the many reputable organizations, enterprises ready to gain from the prevalent strong need for a flexible means of education. Some West African countries in particular have in recent years witnessed a tragic upsurge of highly commercialized correspondence schools, which often are schools in little more than name only. This form of exploitation, more often than not based abroad, has in many developing countries led to frustration, disillusionment and a quite understandable resentment against correspondence instruction as such.

1.5.7.2. Not all commercial correspondence education is bad. Some commercially run establishments are among the most respected and efficient in the field. But this does not alter the fact that very many correspondence schools, whether private and commercial or not, are more interested in giving cheap courses in every sense of the word than student-centred, high quality education.

It is therefore not surprising that teaching by correspondence is recognized in only a comparatively very small number of countries. This does not reflect adversely on the judgement or foresight of educators and official institutions in such parts of the world where correspondence instruction has been virtually ignored. Teaching by correspondence is often regarded as inferior simply because too often it is inferior.

But to a certain extent, the educational authorities are not without fault as regards the present exploitation of correspondence students. The racketeering correspondence organization has an ally in the many good but unimaginative educators who, schooled in a more rigid academic tradition, are consciously or unconsciously opposed to anything that is not part and parcel of the educational pattern they have eccepted as normative. Governments do not need to condone practices that very swiftly can be brought in under legislation. A compulsory government inspection of all correspondence schools and/or necessary government approval of each individual correspondence course - the cost for this would have to be borne by the correspondence school - would very soon put an end to correspondence instruction that does not meet the strictest requirements.

Recognition is desirable to a commercial and essential to a non-commercial correspondence organization, whose work would be meaningless, if it could not offer its students full acceptance of their training.

But the question of recognition and that of control or inspection are linked. The one is implicit in the other. Any official correspondence programme in a developing country would in the long run have to involve both.

1.5.8.1. The large amount of student drop-outs in most correspondence instruction projects is a problem that faces correspondence educators the world over. It is a complex problem and must have many causes. One important factor is obviously the problem of incentives and student motivation; sustaining student motivation over a long period of time is extremely difficult and is a challenge not only to correspondence educators but also to adult educators in general.

1.5.8.2. Encouragement and a positive personal interest in the student on the part of the correspondence organization and/or tutor clearly means a great deal. An experiment with some 4.000 correspondence students in Sweden has shown this in a very dramatic way. The students were divided into comparable groups. The students in one of the groups, a control group, received no encouragement of any kind when they were lagging behind with their work. The other students received from one to four encouraging letters, depending on the group, when they threatened to become drop-outs. Of the students in the control group only roughly 12 % resumed their studies, whereas the corresponding figure for the group that received four encouraging letters was roughly 33 %.

1.5.8.3. Student motivation is, however, a problem not only for the correspondence administrator. Even before a correspondence project is launched, as early as on the planning stage, factors of student motivation must be taken into consideration. The student's incentive for completing a course depends very much on such things as for instance certification, increments or promotion upon completion, and course completion grants.

If - as is already done in e.g. Sweden - the correspondence student is refunded his course fee by the government upon successful completion of certain types of education by correspondence, that in itself would help to keep the drop-out rates down.

1.5.8.4. Another motivational pre-requisite of an official correspondence education programme is also that the courses should be geared to specific, not too long-term goals. If the student has to work towards a relatively distant goal, a series of minor, short-term targets should be set up, leading to the major objective.

2. General Educational Needs in Eastern and Central Africa

2.1. Introductory

The progress already made in the field of education by the states in Eastern and Central Africa is very impressive. In a very short period of time and faced with all the problems of an undeveloped economy, the nations of the area have taken great steps towards an extension of the scope of their educational systems and an improvement of the quality of the education. Of particular significance is the full awareness in the Eastern and Central African states of their prime educational needs. If the achievements sometimes have fallen short of the target set by for instance the 1961 Addis Ababa conference, this is only because the available resources have been inadequate. Education for development has very high priority in Eastern and Central Africa of today. The goal is to bring about as quickly and thoroughly as possible the educational changes necessary to implement the national development plans.

It is in this context that a national use of correspondence instruction in the area must be seen. That this report in some respects centres on shortcomings of the educational systems, does not therefore mean that the very great advances already made are being disparaged or have not been understood. But innovations for development must of necessity be related to what has still to be achieved rather than to goals already reached.

2.2. Educational Objectives and Africanization

2.2.1.1. The pattern of education in the new states dealt with in this report is still, not unnaturally, fundamentally that which was introduced by the former colonial powers; with regard to both objectives and content, it follows closely the prevailing educational systems in the mother country. The cultural heritage and the socio-economic conditions of the African states themselves have until relatively recently received inadequate consideration, and should even now be particularly emphasized. As early as the 1961 Addis Ababa conference, such a policy was, however, explicitly adopted by the African states: "As the students of Africa are exposed to the scientific and cultural aspects of the outside world, they need to be thoroughly grounded in a firm knowledge of their own cultural heritage. The education for the future citizens of Africa must be a modern African education." (Final Report, Conference of African States, 1961).

2.2.1.2. Africanization calls for a revision of the inherited curricula, a work that practically everywhere in the area is under way. The African content in many subjects, for instance Geography and History, has been expanded and given greater prominence.

But there is reason to believe that much of the education given in Eastern and Central African schools and through adult education courses is still not sufficiently related, in a deeper sense, to the everyday life of the students. The cultural background of the African student differs too sharply from that which the predominantly European-orientated educational systems presuppose; he has different frames of reference and other conceptual patterns than those implied in the education he receives. Even very simple "European" symbols might for instance be misinterpreted by the African student because he is unaware of the often quite arbitrary conventions governing the use of the symbols. An arrow meant to denote direction might for example be taken to mean quite literally "arrow" and signify hostility, war or a hunt. In principle the same difficulties, although present in a subtler and less obvious manner are encountered when far more complex conceptual structures are involved. This is true of most subjects. As long as the African student receives an education which is deeply rooted in a foreign culture, his environment will be at odds with what he learns. Despite all that has been done already, this remains a major problem in the region covered by this report.

2.2.2. The Africanization of the educational content in both a superficial and a deeper sense is only one aspect of the Africanization and modernization of the educational systems as a whole. There is a strong tendency to overemphasize the value of an academic education, one which leads to white-collar jobs. This is no doubt due mainly to the colonial heritage of most of the states, but the same academic bias can be noticed in Ethiopia. Facilities for secondary education in technical and commercial subjects are still far fewer than the economic development of the region requires. On the degree and diploma level the tendency is still more pronounced. The following list shows some professional and specialized training courses at present not available in most of the Eastern and Central African countries:
Accountancy (Works and Costs), Actuary, Agricultural Economics, Agricultural Engineering, Applied Science, Auditing, Aviation, and Air Traffic Control, Banking and Finance, Business Economics, Chemical Engineering, Chemical Technology, Dental Surgery, Dietics, Draughtsmanship, Electronics, Estate Management, Hydraulics, Industrial Development, Industrial Economics, Librarianship, Marketing, Metallurgy, Metallurgical Engineering, Mining Engineering, Pharmacy, Photogrammetry, Physiotherapy, Radiography, Secretaryship, Soil and Water Conservation, Surveying (Geodetic), Technology (Food, Leathers, Oil, Soil, Textile, Wood), Telecommunications, Transport and Utilities (Trained Manpower,Requirements for Accelerated Economic Growth in the East African Sub-Region; ECA; E/CN, 14/LU/ECOP/9, 15 October 1965 366). Technology and development courses still play a very subordinate rôle in secondary and higher education, and the university standards and ideals of more developed countries, with their overamphasis on degree courses, are still very deeply entrenched in the region.

2.2.3. One of the major deterrents to reforms swiftly remedying the defects outlined above is a lack of staff and facilities to materialize plans in the conventional manner; the need for action has been clearly stated several times, and 1980 has been given as target date for the completion of a radical expansion of technical and commercial education. (Cf. the Report of the 1961 Addis

Abeba Conference, the 1962 Tananarive Conference, and the 1964 Lagos Plan.)

Correspondence instruction on a large scale could here provide one of the necessary answers to the problem. Particularly the use of correspondence courses to give training in subjects at present not offered on the secondary or diploma level is an interesting possibility. On-the-job training of vocational, technical and managerial skills would of course involve the teaching of theory by correspondence alongside with the acquisition of in-service practice. Similar tasks have been undertaken successfully by correspondence in other parts of the world.

2.3. Learning for Transition

2.3.1. The educational systems of the countries dealt with in this report are generally - just as many others in all corners of the world - closely geared to the factual requirements of a very rigid examination system. Obviously, the existence of a formal, decisive and final examinational test of knowledge and skills has in practice had to determine the aims of the education given to the individual student; a student centred type of education is thus made difficult.

But particularly significant are the consequences such a system have for the concept of knowledge in general, and the modern problem of the obsolescence of knowledge in particular. In order to pass the rigid examinations, the student is primarily expected to acquire and master a certain amount of subject matter; the attainment of knowledge for knowledge's own sake is encouraged, and a formal, academic tradition is established. This system is strongly selective and competitive, and it tends to encourage memorization and other kinds of mechanical learning. It has the effect on both student and teacher of establishing an image of education as something static: education is the gaining of a given, essentially stable and unchanging mass of knowledge, attained once and for all by the pre-examinational studies. Learning for transition or "life-long learning" must needs play a very minor rôle in an educational pattern of this kind.

And yet, one of the paradoxes of modern society is that the imparting of knowledge and skills can no longer be the only concern of the educationist. Just as important is to make the student aware of the impact of change upon his life and train his ability to adjust himself to change. The obsolescence of knowledge should be stressed and should be taken into account just as much as the value of knowledge. Factual knowledge alone has a limited value in a society where new knowledge is constantly being attained, and once accepted theories and concepts are continually being revised. Practically usable knowledge for the man in the street in such an environment is more the ability to find and use the relevant facts than to supply them, more the ability to ask the right questions than always to give the right answers.

2.3.2. The importance of education by correspondence in this context is that it can help to develop the student's capacity to work on his own and to train the study skills and study habits that are essential to the concept of life-long learning. Again, a correspondence course programme linked with for instance a postal book-lending project or a mobile library service can go a long way towards stimulating and developing the student's fact-finding ability, perhaps even more than a library service in isolation; it is possible to give the individual, inexperienced student greater initial guidance than otherwise. He is gradually accustomed to turn to libraries, audio-visual centres, etc., to seek and find facts on his own.

2.4. Literacy Training

2.4.1. Literacy training is generally given high priority in societies where only a small minority of the total population can read or write. At one time almost synonomous with adult education, literacy work has always fired the imagination of the more developed countries and has perhaps a longer tradition in Africa than any other non-indigenous form of education. But owing among other things to the population explosion that not least Africa at present is witnessing, the number of illiterates, absolutely and even in some cases relatively, is growing annually. This is a development that impedes a widespread adult education activity of the kind common in for instance Scandinavia. It also means that countries with a chronically low literacy rate cannot tap their large potential resources of manpower on all levels. Politically, too, the existence of a large mass of illiterates are usually considered undesirable.

Yet, very little research has been devoted to the actual importance of literacy in for instance the developing states of Eastern and Central Africa. That the economic realities of the region demand a very high priority for literacy training is usually put forward as an axiom. It is also incontestable that a very high literacy rate is an essential pre-requisite for development in an already relatively well developed society. Characteristic features of such a community are generally a dissolving rural and agricultural subsistence and a rapidly expanding modern economy. But where this is not the case, literacy training might very well be less important for initial development than for instance the training of productive or innovative skills, either in connection with functional literacy training or without this element.

The problem of priorities and general research in the field of literacy work is seconded by that of follow-up material. Most of the existing literacy programmes terminate with a certificate of literacy. They provide very little follow-up, owing to lack of funds and a dearth of qualified personnel. Thus, a probably considerable amount of newly literates soon lapse into illiteracy.

2.4.2. Follow-up material for newly literates could be an extremely simple form of correspondence course; i.e. the material could incorporate self-check exercises and some questions, the answers to which would be sent in to a central organization. Thanks to this, it would be possible to give the newly literates educational material with an immediate bearing on their everyday work, and at the same time a central authority could follow their progress.

2.5. Teacher Training

2.5.1. The present expansion, Africanization and general improvement of the school systems in the countries dealt with in this report have naturally focused attention on teacher training. The rate and efficiency of the desired reforms within the schools naturally depends very much on the available supply of qualified teachers. At present, there is in this area a bottle-neck which is a major impediment to educational progress and consequently to social and economic development.

The problem has two aspects: the upgrading and in-service training of teachers already on the job, and the training of new teachers on both the primary and the secondary level. Generally speaking, there is a shortage of primary and secondary teachers, but it is more pronounced on the secondary level, where the dependance on expatriates is greatest. The dearth of African science teachers is particularly serious, because it tends to preserve the present imbalance between the arts and the sciences, to the detriment of a sound economic growth.

A majority of the primary teachers are admittedly substandard; this is not seldom true of many of the secondary teachers as well. The upgrading of these teachers holds a high priority in the national plans for development, but the just as important extension of school facilities, especially on the secondary level, makes it very difficult not to say impossible to release large groups of teachers for any more considerable length of time. Some in-service training scheme appears to be the only possible answer to this training problem.

2.5.2. Teacher training by correspondence, preceded and followed up by face-to-face courses and sometimes linked with radio, would undoubtedly help to solve the teacher problem. Thanks to the use of correspondence courses, a comparatively short period of "conventional" training would suffice for the teacher groups to be upgraded. Such training programmes would have to include for instance a course in Teaching Methods, and not only comprise the academic subjects of the school curriculum. Probably, too, a complementary system of itinerant inspectors/instructors would have to be devised.

Teacher upgrading by correspondence has been tried successfully since the 1930's in many countries, and there is every reason to believe that it would be feasible in Africa too. Kenya's national correspondence project will in the first instance be targeted towards teacher upgrading, and the recommendations for Ethiopia in this report are based on the need for inservice training of teachers. Although this problem in this report has received special prominence as regards two of the countries only, it is however, very topical also in the others.

2.6. Teaching Methods

2.6.1. Traditional teaching methods still dominate in the area dealt with in this report. The lecture-type class-room lesson is, however, being questioned. The Kenya Education Commission Report is indicative in this respect, when it recommends a more child centred education and a more extensive use of activity methods. It is also probably true to say that throughout the region adult education already makes a not inconsiderable use of modern educational theory and method.

But both adult education programmes and even more so the school system has suffered from an exodus of qualified teachers into the civil service and politics in connection with Independance. They left a vacuum which is only slowly being filled, and the amount of unqualified or underqualified teachers is still very great. This has naturally made it very difficult to implement and sometimes even to contemplate the introduction of radically new teaching methods. Then, too, the existing teaching facilities are often very inadequate, although deficiencies are being eliminated as swiftly as possible.

2.6.2. The use of self-instructional material, among them correspondences courses (without sending answers to be marked), in schools is not seldom recommended by educationists as a means of making the tuition more effective. Particularly common in for instance Sweden are correspondence courses used as regular text books both within the regular school system and within industry and commerce. The production of high quality correspondence courses in a developing country could in this way supply the school system with self-instructional text-books that could carry some of the teachers' load without lowering school standards.

2.7. Unemployed Primary School Leavers

2.7.1. On of the most alarming trends in later years in the new states of Eastern and Central Africa is the existence of large and rapidly growing numbers of unemployed primary school leavers. This problem has many ramifications: economical. educational, sociological, and not least political.

Ten years ago unemployment was not found among school leavers in the countries dealt with in this report; the completion of Standard VIII or the equivalent was a reliable passport to wage or salary employment. In the popular conciousness this state of things still prevails. Consequently, the fact that only the fortunate among the school leavers can count on obtaining a job has come as a severe shock to the students and their families. The seriousness of the situation is enhanced by the rupturing effect schooling has had on family and social ties in the home environment of the student. A return to the agricultural sector of the economy is very often made impossible for the school leaver, because, by the very process of his education, he has become estranged from his relatives. There is a mutual rejection of each others ideas, ways and outlook on life.

The rising flood of unemployed school leavers is drawn towards the towns and population centres, where the emergence of a semi-educated, jobless proletariate provides a breeding-ground for criminal and politically subversive elements.

It is a tragic paradox of the situation in most of Africa today, that an acute manpower shortage higher up in the educational pyramid is concurrent with this just as acute and dangerous manpower surplus.

2.7.2. One of the possible solutions to the problem that suggests itself is to draw on the abundant reservoir of superfluous semi-skilled manpower for trainees to fill shortages in critical sectors, where skilled manpower resources fall far short of the requirements. The need for resolute action is imminent. Grave as the school leaver problem already is, it will be very much more alarming in only a few years' time, when remedial measures will be far more difficult to take, owing to the magnitude of the task. In Tanzania alone, the present Five Year Plan will see the creation of about 1,1 million school leavers and a total of not more than roughly 100.000 new wage opportunities for these school leavers.

Hardly any undertaking could therefore be more vitally important to the future of Eastern and Central Africa than some form of development-planned training scheme for primary school leavers. Such a training scheme must, however, not unquestioningly accept either the objectives or the curricula of the present secondary schools. It should be based on a careful analysis of estimated future high-level and medium-level manpower requirements. Several surveys have been carried out that provide a basis for this, e.g. the Tobias manpower survey report for Tanzania. It is imperative, however, that a relatively long-term prognosis is prepared; the gestation period of most training schemes is such that they have an impact on the economy only five to ten years after their inception.

2.7.3. The proportions of the training task confronting nations struggling with a school leaver problem are so enormous that conventional educational methods are inadequate; the prospective students number literally hundreds of thousands, and the present school systems are already very heavily strained.

The logical inferences that can be drawn from the basic facts and hard realities of the situation are that some form of mass education on a national level and geared to estimated future needs is one of the very few realistic alternatives open to discussion. Time is furthermore running very short indeed. Preoccupation with the many urgent problems of today must not be allowed to delay the solution of one of the really important problems of contemporary and future Africa.

Correspondence education, linked with radio broadcasts and face-to-face teaching to the extent and in the way conditions allow, is therefore nothing of only peripheral interest to modern Africa. As one of the very few vehicles of economical, effective mass education, and one which has already proved its value in many parts of the world for the past half-century and more, it should have a vital rôle to play in African education. Strangely enough, though, it has hitherto only figured in the margin of educational discussion on the continent.

The direct impact correspondence education could have on especially the school leaver problem promises to be very great. In this report, particularly the recommendations made for Tanzania have been determined by this aspect of the possible uses of correspondence instruction.

3. Ethiopia

3.1. Correspondence Instruction in Ethiopia

3.1.1. Correspondence instruction in Ethiopia is of foreign origin; Ethiopian students studying by correspondence are enrolled with commercial schools based in the USA, Great Britain, the United Arab Republic or Kenya. This is not without problems. The courses have naturally not been written for Ethiopian conditions, nor are they always in accordance with Ethiopian curricula: they are not an integral part of the Ethiopian educational system. Communication between the student and the correspondence school is time consuming and costly for the student, and much badly needed foreign currency is exported from the country. In some quarters doubts have also been expressed regarding the quality of some of the courses, but no objective assessment of them has been carried out.

3.1.2. Apart from this commercial correspondence instruction, a few attempts have been made to organize education by correspondence within Ethiopia itself. US AID after the Second World War especially stressed the value of correspondence instruction for teachers in rural districts, as a complement to the summer refresher courses usually held for them. The teachers were to study correspondence courses in English, Mathematics and Science as a preparation for the refresher courses. Attempts made to implement this programme, in 1949, 1956 and 1957, were not successful. It is also doubtful if the scheme, as envisaged, can be regarded as correspondence instruction, because no provision was made for a regular communication between the student and a teacher; the students were not required to send in written exercises.

The Extension Department of Haile Sellassie I University has also experimented with correspondence education. The Ministry of Public Health wished to offer Biology and Chemistry by correspondence as part of a more extensive training scheme for some 20-30 students from a health training institute (at Gondar). The courses were prepared by the Science Department of the university and administered by the Extension Department. The students, stationed at public health centres throughout the country, studied the courses, and upon completion of them attended laboratory sessions at the University during the summer, prior to an examination.

This experiment, although not entirely negative, has not been an unqualified success, and it has now been abandoned. The students' results were much poorer than anticipated. Several reasons for this can be advanced. The correspondence courses were prepared by people who, although qualified and able teachers, had no previous experience of writing self-instructional material of this kind. Their knowledge of the students' level was also very limited, and much of the course material was written on the basis of unrealistic assumptions about the students. Furthermore the students were severely paced. They were required to complete the correspondence courses within a six month period while at the same time attending to their normal, strenuous duties at the public health centres. There were also serious administrative problems connected with the running of the courses and corresponding with the students. The Extension Department of the University does not have any staff members with first-hand knowledge of correspondence education routines, and it has no special facilities for handling this kind of work. Again, Biology and Chemistry, being laborative subjects, are particularly difficult to handle by correspondence.

Despite these initial problems, both the Ministry of Public Health and the Extension Department believe in the value of correspondence education for Ethiopia, if it is institutionalized in the country and the courses either written or possibly adapted for Ethiopian conditions. At present, however, the Ministry does not recognize diplomas or courses offered by the commercial correspondence schools operating in Ethiopia.

3.2. Adult Education in Ethiopia - Activities and some Needs

3.2.1. Adult education in Ethiopia is divided between many different authorities. On the literacy level the Ministry of Community Development and private organizations, foremost of which are The National Literacy Campaign Society and the Yemrisrach Dimts Literacy Campaign, share the responsibility for the work done. Their efforts in this field, which have hitherto been independant of one another, are now to be coordinated, particularly as regards the production of literacy material.

The Ministry of Education and the Ministry of Public Health, are bot engaged in adult education activities within their respective spheres, and the Ministry of Community Development naturally gives instruction to the general public on an elementary level. Most of the more advanced adult education is, however, done by the University Extension Department of Haile Sellassie I University. The Department is based in Addis Ababa but has centres in Asmara, Harar, Dire Dawa, Debore Zeit and Jimma. It has at no time less than 1000 students and on an average some 1600 to 2000. The courses run by the Extension Department are not only on the degree level; also diploma courses are offered (e.g. secretarial courses), and some technical courses, for instance in Draughtsmanship. The language of instruction is usually English, but law courses run for the Faculty of Law are in Amharic.

Independent of existing official institutions has lately sprung up what has been termed the Public Schools Adult Education. This is not an organized, coherent movement. It is a collective name for the evening classes run by school teachers as a thing apart from their normal duties. The quality of these evening classes varies greatly; there is no inspection or coordination of efforts and standards.

3.2.2. Within the field of adult education in Ethiopia there is a large latent need for an indigenous, recognized correspondence instruction programme. The hunger for further education among particularly the middle level categories (i.e. those who have up to VIII schooling Grade) is very great. Most of the persons in this group are attracted to night schools or evening classes of some kind, this being the main form of education open to people working during the daytime. No extensive survey of night school students has been carried out, but an interesting inquiry has been made into the background and future plans of a limited number of such students. This inquiry concerns 38 Ethiopian staff members of the Ethio-Swedish Pediatric Clinic at Addis Ababa. It is included in extenso in this report as appendix 3. The sample group chosen is too small and probably not representative enough for significant conclusions to be drawn from the survey. Yet, the facts it brings to light do suggest some hypotheses about the areas in which the need for further education is greatest in Ethiopia. Most of the 38 night school students, the overwhelming majority of whom were between 20 and 30 years of age, had only Grade VIII and wished to advance themselves to the level of at least Grade XII (School Leaving Certificate.)

The impression of the Ministry of Public Health is also that the greatest demand among health workers for further education is for courses from Grade VIII or X to Grade XII.

Much the same can be said about another group vital to national development: the teachers. Until very recently Ethiopia found it necessary to run an emergency teacher training scheme. Under this scheme, which was in operation for some ten years, the teachers turned out had received about one year's special training over and above the basic Grade VIII requirements. This large and important group is therefore one that would immediately benefit from upgrading to Grade XII. The Ministry of Education also loses a number of teachers every year to the administration and to private enterprise and has to fall back, in order to fill the vacancies, on high-school drop-outs, i.e. persons who have roughly Grade XI.

3.3. Possible Uses of Correspondence Instruction in Ethiopia

3.3.1. Correspondence education can be of immediate use to Ethiopia in upgrading 1) teachers, and 2) health workers. Both these categories are vital to the development of the country, and both are large enough in themselves to warrant a correspondence education programme.

Health workers are usually unwilling to move out into rural areas, because they there find it very difficult to further their education as a means of gaining promotion or a better salary. The Ministry of Public Health therefore has difficulty in recruiting and keeping qualified personnel. The tendency is to avoid service in the more outlying districts where, on the other hand, the need for health officers is perhaps greater than elsewhere. In the towns, too, basically the same problem is encountered. The nature of for instance a nurse's work is such that night and evening duty must be part of the daily routine. Regular attendance at night schools is hardly possible under such conditions; the work makes further education or upgrading by conventional means unfeasible. If, on the other hand, health workers were given an opportunity of upgrading themselves on the job, this would have both direct and indirect positive consequences for the Ethiopian health services. It would be very much easier to recruit competent and ambitious people, for instance nurses, sanitarians and technicians, and in the long run it would mean a gradual qualitative improvement of an important middle level manpower group.

Much the same arguments apply to the teaching profession. The teachers have the same incentive to study and are also held back by the lack of further education facilities outside the largest centres.

Roughly 400 nurses and as many health technicians can be counted on initially for a correspondence programme aimed at leading up to Grade XII from Grade VIII. The amount of teachers who would avail themselves of such a programme is difficult to estimate, but it would hardly be less than the amount of health workers, probably considerably larger.

3.3.2. Comparable training problems exist for other groups as well. Dressers belonging to the Ethio-Swedish Pediatric Clinic are for instance a category of health workers who, on a lower level, also could benefit from education by correspondence. They receive an elementary basic training and are then generally posted to country districts.

There they are more often than not the only person in the area with any medical training at all. When they are called in to Addis Ababa for refresher courses - which is done periodically - their districts are therefore left without medical care of any kind. Another problem connected with the refresher courses is the acute shortage of accommodation in Addis Ababa for the relatively large group of dressers, when the courses are held.

These refresher courses could to a very great extent be replaced by a correspondence course in Pediatrics. Such a course would have to be available in two or possibly three different versions; one on an elementary level, and one or two on a more advanced level. As a reinforcement and extension of the basic course in Pediatrics, there would be a need also for a course in Public Health and in some general school subjects, primarily Physics, Mathematics and Chemistry. Certification linked with promotion and/or greater increments would have to be a necessary feature of this programme. Given this, a strong student incentive to study can be foreseen.

The success of such a scheme, however, depends very much on two factors about which very little is known: this group of students' ability to comprehend written instructions, and the possibility of maintaining some form of more or less regular communication with the students, who may be living in very remote areas.

Both these problems have a very direct bearing on the general problems of correspondence education in Ethiopia, and will be discussed at length elsewhere (3.4).

3.3.3. Complementary training by correspondence for community development workers is yet another feasible development in Ethiopia, if a national correspondence scheme were instituted. The requirements here would be a system of courses in subjects such as Sociology, Social Science and Rural Development. The correspondence programme would have to be on the postsecondary level and lead up to college or diploma level. However, the potential amount of students for such a training is too limited to warrant anything more than possibly a subsidiary experiment for an alrealy existing national correspondence unit.

3.3.4. One of the important aspects of correspondence instruction work in a developing country is that a correspondence unit has the experience and resources necessary for the production of written educational material. Not least the techniques used in constructing modern self-instructional texts can have a profound influence on the general development of material for written instruction in the country. The expansion of a correspondence instruction unit into a centre for the production of various kinds of educational material can therefore be envisaged. Indirectly, the establishment of correspondence education in Ethiopia would thus mean a very real contribution of a pedagogical nature towards the writing of both follow-up books for newly literates and written aids in more advanced areas as well.

3.4. Deterrents to Correspondence Instruction in Ethiopia

3.4.1. Notwithstanding the obvious advantages of correspondence instruction for Ethiopia, it must be emphasized that there are several grave deterrents to a possible indigenous correspondence instruction scheme.

One of the most obvious problems is that of communicating with students. Outside the larger centres, the postal service is erratic; mail can easily go astray and is usually slow. A very large percentage of the population lacks any kind of postal address. Schools, however, are generally reached by road or path; teachers and some other categories of personnel receive their salaries by comparatively regular runner or courier services, and for instance health workers and dressers are reached by regularly visiting district doctors and Ministry Officials. Throughout the country there exist different such "unofficial" communication networks for different groups of people. The all-weather roads are comparatively good, but they only cover a small part of the country. Some of the remoter areas can only be reached by mule in the dry season. Ethiopian Airlines, one of the best on the continent, links all the main centres and can be used for sending communications and even money. Like the roads, however, the regular air network is limited to the larger towns. Mission flights do serve inaccessible or isolated places, but they are not regular and are operated by small planes with a limited load capacity.

It will probably be at least ten years before general communications in Ethiopia are sufficiently developed to carry a more extensive, nationwide correspondence education programme. At present, instruction by correspondence is possible with a few exceptions, only in and around the chief population centres, in more densely populated districts, and if the many "unofficial" channels of communication are used.

3.4.2. Ethnical and cultural factors also combine to make correspondence education in Ethiopia problematic. Although Amharic is the official language and English is used in higher education, students experience language difficulties even on the secondary level. Both Amharic and English may well be second languages to many students in a country comprising different languages - some with a written tradition - and different ethnical groups. A language proficiency test for all presumptive correspondence students is therefore a pre-requisite for correspondence education in Ethiopia, perhaps even more than elsewhere.

3.4.2. Ethiopian education in general is characterized by a dearth of competent textbook writers. Hand-books and text-books for education above the primary level are to a great extent imported from abroad. This deficiency is gradually being made up, but for many years to come there will be a considerable shortage of indigenous text-book authors, and consequently of correspondence course writers as well.

Import and adaption of correspondence courses written for other students and geared to foreign curricula is not a long-term solution of this problem to be contemplated with enthusiasm. Such a policy might be envisaged as short-term, emergency expedient, but it will not do in the long run. A correspondence education scheme that is not in a position to freely implement its plans concerning the correspondence courses themselves, is an artificial product, dependent on constant blood transfusions of outside initiative and ideas to survive. But it must be self-generating.

3.5. Ethiopian Interest in Correspondence Education

3.5.1. Despite the major problems involved, and fully aware of these problems, two Ethiopian institutions, The Extension Department of Haile Sellassie I University and the Ministry of Public Health, have already, as mentioned, attempted the use of education by correspondence. The Extension Department is planning to make a renewed effort to start a correspondence education scheme late in 1966. It is to have the nature of a pilot project, and its aim is to upgrade persons with Grade VIII to Grade XII level (School Leaving Certificate). Courses would be offered in Mathematics, English, Geography, History and either Chemistry, Physics or Biology. Local centres for the programme would be established at places where communications and other facilities are good, e.g. Asmara, Harar, Jimma, Gondar, Dessye, Yrgalem or Nazareth. Students would be enrolled from the neighbourhood of these local centres only. An initial intake of about 500 students is envisaged.

Correspondence courses have been placed at the disposal of the Extension Department by institutions overseas, chiefly the National Extension College in Great Britain, and will be adapted for local use. The project would be in operation for four to five years and would be continously evaluated.

3.5.2. The Ministry of Education is definitely interested in all new educational approaches, including correspondence instruction. However, the Ministry has no experience or knowledge of this form of education and would therefore welcome an opportunity to learn more about its possibilities.

3.6. Proposed Seminar on Correspondence Education - Recommendations

3.6.1. The proposed seminar on "The use of Correspondence Instruction in Adult Education Means, Methods and Possibilities" is of direct value and interest to several Ethiopian educational authorities and should therefore include Ethiopian participants, provided that some form of follow-up activity exists (cf. 3.7.).

3.6.2. It is recommended that invitations to the seminar be sent to the following institutions, who have all expressed a wish to participate: The Ministry of Education; Haile Sellassie I University, Extension Department; the Ministry of National Community Development and Labour. They should be represented by one participant each.

The Ministry of Public Health takes a very positive view of the aims of the seminar and is prepared to encourage and recognize a national correspondence education programme. It does not feel confident, however, that the activities of the Ministry are purely educational enough to warrant sending a participant of its own to the seminar. Despite this, it is recommended that the Ministry is fully informed about the seminar and also invited to participate.

3.6.3. The proposed seminar should, in order to serve Ethiopian interests best, give a broad introduction to all aspects of correspondence education, laying special emphasis on how educational and administrative problems of different kinds can be mastered. Three specific problem areas should be given particular prominence:

1. The difficulties encountered by students using a foreign (second) language as a medium of instruction. How is remedial language training best given by correspondence? The construction of language proficiency tests.

2. The maintaining of student interest; why do students drop out, and how is student drop-out kept down?

3. The training of correspondence course writers and correspondence teachers.

3.7. Outline of a Pilot Project - Recommendations

3.7.1. The value for Ethiopia of the proposed seminar on correspondence education is very much lessened, if the present plans of the Extension Department fail to materialize. The aim of the introductory training seminar must be a) to give administrative officials an understanding of the methods, problems and routines of an educational method they will come into contact with during their daily work; and b) to prepare personnel for a task they are about to enter upon and of which they have insufficient experience. Without some follow-up activity in the country itself, the idea of the seminar would be partly defeated.

3.7.2.1. Aid should therefore be given to Ethiopia, so that a limited pilot project can be carried out. The general objectives of the Extension Department, as outlined in 3.5.1., should be accepted for this pilot project; they are based on feasible assumptions of what might be practically possible in Ethiopia.

3.7.2.2. There are several valid reasons for advocating the initiation of a pilot project despite the deterrent facts enumerated in 5.4.1. - 5.4.3.

1. A pilot project under difficult conditions in Ethiopia would give results which, whether negative or positive, would be very valuable to all developing countries, and particularly African states.

2. The pilot project should last for five years. During this time communications in the country can be expected to get successively better.

3. If successful, a pilot project of the kind envisaged would provide Ethiopia with a platform for rapidly expanding her mass education facilities. The importance of this for an accelerated economic growth need not be particularly stressed.

4. The pilot project would be an attempt to meet functional manpower requirements by expressly aiming at the upgrading of some middle level personnel groups essential to development. Supineness in the face of the admittedly very formidable problems would on the other hand probably be more costly and harmful in the long run than even an unsuccessful pilot project. Especially teacher upgrading by correspondence is an absolute first priority and would affect very positively development in the 1970's.

5. The production of correspondence course material would stimulate the indigenous production of other educational material

and can also be a help in curriculum development activites.

6. Without aid, the initiative about to be taken in the country by the Extension Department of Haile Sellassie I University has very slender chances of succeeding. Expertise in the field of correspondence education is not available in Ethiopia, nor is there the equipment necessary for running the project. Against the challenge of unusually adverse conditions, this means that the pilot project is doomed to failure, if outside resources are not forthcoming.

3.7.3.1. The pilot project should aim at leading up to School Leaving Certificate from Grade VIII (Grades IX - XII) in Mathematics, English, Geography, History and one laborative subject. Over and above this, there should be specialized subjects for different groups of students in for instance Teaching Methods, Health Science, secreterial and/or managerial skills. The pilot project should be directed at 1000 to 1500 students as a minimum.

3.7.3.2. The students should be 1) active teachers, 2) health workers or 3) civil servants. Selection tests should be used for enrolment, among other things to determine language proficiency. A number of teachers in primary schools would most probably benefit from courses on a standard VI level in some subjects, but the initial project should not be below standard VIII level for two reasons:

a) Giving instruction by correspondence on the primary level is generally more difficult than on more advanced levels; the chances of success for a pilot project, already faced with many other problems, would therefore be greater, and the risk of failure less, at the secondary and subsequent levels.

b) The preparation of correspondence courses in Amharic would have to be done by Ethiopian staff. This presupposes a period of training, which can only be effective in work with material written in Enlish, the language common to both the expatriate and the supernumerary staff. (That in a few exceptional cases, e.g. a simple course in Pediatrics, courses would have to be in Amharic from the very beginning, does not affect the basic policy.)

3.7.3.3. The correspondence education should be linked with a simple postal library service, using inexpensive paperbacks. A relatively wide and discriminating reading could thus be made compulsory for high marks. This can be done by giving questions in the correspondence lessons to test the student's reading and judgement. Memorization learning must be actively discouraged, which calls for the provision of supplementary reading matter.

3.7.3.4. Study groups should be formed wherever possible, and radio broadcasts should be linked with the written courses. Face-to-face sessions and laboraty courses should be held at the local centres, where the student also could receive individual help and guidance whenever necessary. Initial and follow up "traditional" courses should be an integral part of the programme.

3.7.3.5. As the pilot projects proceeds, the possibility should be investigated of extending correspondence instruction into the fields of vocational and technical training, although a certain traditional reluctance to engage in commercial (and technical) activities, and hence to train for them, would probably tend to retard such an expansion.

As a special experiment with a less advanced student group, a correspondence course in Pediatrics should be run in collaboration with the Ethio-Swedish Pediatric Clinic, and a follow-up course for newly literates in collaboration with the literacy organizations.

3.7.4. It is not unnatural to institutionalize the correspondence unit by making it a part of the Extension Department of Haile Sellassie I University, but the full cooperation of the Ministry of Education must be ensured for such a step. Furthermore, the correspondence unit must be at the disposal of any ministry or organization wishing to run a correspondence instruction programme; it must be a service unit on the national level, although (perhaps only during its early years) formally linked to the university for practical reasons.

3.7.5. Outside aid for the project would be needed in the form of a) skilled manpower and b) equipment. Initially, the demand would be for an educationist with long experience of the planning, writing, and editing of correspondence courses, and an expert on the administrative and office routines of education by correspondence. Once the preparations had got under way, a skilled secretary-typist, a librarian and a course editor would be required. The latter could be Peace Corps Volunteers.

The amount of equipment necessary depends to some extent on whether the correspondence unit should do its own printing or not. As printing does not appear to present great difficulties in Ethiopia - the Berhanena Salem Printing Press has a very large capacity - a separate printing department (offset printing) can most probably be dispensed with. Standard office materiel can be obtained locally, but some items, for instance special tables for holding student cards, would have to be imported.

The Extension Department of the University can be expected to supply the necessary local supernumerary and other staff, and office accomodations.

3.7.6. A fee for the correspondence courses would have to be taken, not least for psychological reasons, but it should be kept to a minimum and cover running costs only. The initial investment in equipment and course writing would, together with the salaries of the expatriate staff, have to be borne by foreign aid. An estimate of the cost of the aid is given in appendix 2 (A).

3.7.7. A postal (or mobile) library service and the production of follow-up material for newly literates (some of it with a correspondence feedback) can be very loosely linked to the correspondence instruction unit or even be semi-independant but should be regarded as subsidiary activities. The production of follow-up material should be regarded in principle in the same way as the planning and printing of correspondence course material. The cost of the technical production would be borne by the correspondence unit and special provision made for this in the unit's budget, but the material should be largely planned and written by the different organizations engaged in literacy work.

3.7.8. It is recommended that a pilot project as outlined above (3.7.1. - 3.7.7.) be planned and established so that preparatory activities could begin in August or September 1967, upon the return to Ethiopia of the Ethiopian participants in the proposed seminar (to be held in the middle of 1967).

4. Kenya

4.1. Correspondence Education in Kenya - Experiences and Plans

4.1.1. For the past few years the question of using correspondence instruction as a part of the regular educational system has been given much serious thought in Kenya. The interest has been particularly great at the former College of Social Studies, Kikuyu, which is residential and attached to University College, and the Extra-Mural Department of University College, Nairobi. The Extra-Mural Department has run an experimental correspondence course in Economics, and the Principal of the College of Social Studies, who visited the United States in 1965 under a grant to study correspondence education at the American universities, has also conducted a pilot project based on American university level correspondence courses.

4.1.2.1. The Extra-Mural Department's course in Economics, held in 1965, integrated television, correspondence education and group instruction. 160 students paid the full registration fee, 10 shillings, which entitled them to correspond, join a viewing group and obtain a handbook that was prepared for the course. Half of these students were able to join classes run in six centres, where each TV talk was followed up by one hour's supplementary teaching by a tutor. Between 90 and 124 students submitted correspondence assignments for marking. After the final TV programme, an end-of-course weekend seminar was held in Nairobi, which 70 students attended. Student performance on the correspondence course was very good.

The course handbook sold well among the public at large, and a considerable amount of people seem to have followed the TV broadcasts.

The marking of students' assignments and the administration of the correspondence course was undertaken by the staff of the Extra-Mural Department. All costs had to be met from Departmental funds and gifts, and therefore had to be kept to a minimum. The total overall cost of the Department was about £ 150, which in comparison with normal extra-mural costs per student would imply a saving.

4.1.2.2. Some of the conclusions drawn from the experiment are:

a) A visual aids specialist should be used for preparing the TV material.

b) The staff of the Extra-Mural Department could barely cope with the clerical and other work required by the correspondence course. Any more elaborate programme of correspondence education would require additional marking staff and clerical staff.

c) Students were asked to submit their written assignments once every fortnight. This time gap proved to be too short. Three weeks would be more reasonable.

The general conclusions drawn from the experiment are here quoted in extenso:

"There is no doubt that this form of mass education is possible to develop easily and cheaply. Alongside the use of radio, it is the only way of making a real impact on the problems of educating adults in Kenya.

The use of specialist, skilled tutors in programme presentation alleviates shortage throughout the country and can provide excellent teaching. The use of new media is stimulating to students. The possibility of reproducing programmes makes it very economic. The use of "programming" as a teaching technique can simplify the learning process for students. The provision of regular correspondence assignments affords a vital stimulant to students studying on their own. Last but not least, this is the only really economic way in which the many adults in the far flung corners of Kenya can be reached."

4.1.3. An attempt to adapt borrowed American university courses for use in Kenya had to be abandoned by the College of Social Studies; differences in curriculum requirements, etc., proved to be too great. Thus, it became clear at an early stage that only purely Kenyan courses could meet Kenya's needs. The experiment has, however, clearly shown that there is a need for part-time degree facilities, and perhaps an even greater demand for courses on the diploma level.

4.1.4.1. Also the Ministry of Education, realizing the possibilities of unconventional approaches to supply trained personnel in fields vital to national progress, began exploring the implications and advantages of a national correspondence education scheme. The Kenya Education Commission Report ("The Ominde Report"), Part I, dwelt particularly, among other media, on education by correspondence and recommended its use in adult education.

4.1.4.2. It is, however, in another field that the Ministry considers correspondence tuition to be of even greater potential importance. The upgrading and further training of teachers in primary schools would improve significantly the standards in the Primary School System.

This could advantageously be done by correspondence.

The bulk of the teachers in Kenyan Primary schools are so called P3 teachers, whose academic and professional standard is unsatisfactory. There are about 12000 of these P3 teachers in service in Kenya today. Annually, roughly 1400 present themselves for the examinations giving promotion from P3 to P2 status. The Ministry is planning to conduct a new examination, the Junior Secondary Leaving Examination, success in which would give P3 teachers promotion to P2 level. The J.S.L.E. would be on the Form II level and would also be open to the general public.

Correspondence courses aimed at preparing candidates, primarily P3 teachers, for the new J.S.L.E. would be of great service to the Ministry and would mean a considerable expansion of the capacity of the educational system in an important sector. A correspondence programme at this level could, according to the Ministry's estimates, perhaps offer a total student clientele of about 20000, and as much as 7500 enrolments could possibly be anticipated in the first year. In these estimates are included the potential number of students in Harambee schools and outside the regular school system.

4.1.5. The introduction of supervised correspondence instruction in Kenya's Harambee schools has also been discussed within the Ministry of Education. These schools, of which there are about 100, have been formed outside the regular school system as the result of voluntary efforts and sacrifices by the citizens in communities all over the country. The Harambee schools are nominally secondary, but their general standard is not up to the requirements of the regular secondary schools; in many instances the Harambee school teachers have little more than primary schooling themselves. The Harambee and private secondary schools will in 1967 have an estimated 14000 students in Form I and 11000 in Form II.

Supervised correspondence instruction in Harambee schools might provide an answer to the difficult question of raising the educational standards in these schools swiftly. But this would probably mean that a special series of correspondence courses on the secondary level would have to be prepared for this young group of students. Furthermore, the Harambee teachers would have to be instructed in the techniques of supervising correspondence studies.

Considering the extra difficulties, the Ministry has for the present decided against experimenting with supervised correspondence instruction in Kenya, wholly concentrating on raising the standard of teachers, both in primary and Harambee schools.

4.1.6.1. In March 1966, Kenya was visited by a team of specialists from the United States. The team consisted of L.H. Adolfson, Chancellor, University Center System, University of Wisconsin, W.G. Harley, President, National Association of Educational Broadcasters, and H.B. McCarty, Professor-Director of Radio-Television Education, University of Wisconsin. The survey team has submitted a report with proposals for the establishment of a Correspondence Instruction - Radio Unit, on the (amended) basis of which Kenya has decided to act. The Unit will be set up by the University College, Nairobi, in close cooperation with the Ministry of Education.

For this purpose, the extension activities of the University College have been reorganized with effect from July 1st 1966. An Institute of Adult Studies has been established by the University College. It comprises three sections: a residential centre (formerly the College of Social Studies, Kikuyu), an Extra-Mural Department running chiefly non-residential courses, and a Correspondence Unit. The activities of the three departments are led and coordinated by a Director of Adult Studies.

The correspondence unit is to be established as soon as possible, and a request for aid covering the capital outlay for equipment, and for expatriate specialists has been put in to US AID. It is hoped that the unit can have its courses ready by January 1968, when its operations are scheduled to commence.

4.1.6.2. The initial programme will be run for the Ministry of Education and be directed primarily at upgrading P3 teachers to Form II level, i.e. cover Form I and Form II. But the unit will be a service organization for all ministries and organizations wishing to run correspondence programmes. Not least the University College itself is interested in extending the unit's activities into the field of diploma and/or degree courses.

The correspondence unit is intended to be largely self-supporting after a preparatory and introductory phase. There will be a radio and ETV link to augment the correspondence instruction, which is intended to be firmly paced.

4.1.7. Mention should also be made of the fact that Nairobi is the centre of a commercial correspondence college with branch offices in Kenya itself, in Tanzania and Uganda. This college, the British Tutorial College (B.T.C.), is also active outside East Africa proper, in Ethiopia. It uses courses from a correspondence school in the United Kingdom, some of which are adapted or partly re-written for East Africa. Translations of British courses into Swahili is undertaken.

The college makes use of a number of local offices in major centres, not only for student acquisition but also as links in the administration of the courses. It is very usual for students to hand in their answers to assignments at the local centre rather than post them. The regular bus services are extensively used by the B.T.C. to transport these answers to a place where marking is done, generally Nairobi, and back to the centre for distribution to the student. In Nairobi, bicycle messengers are used to get student answers quickly to markers.

The courses are often study guides to common text-books.

No enrolment figures are given by the college, but observations made regarding the degree of work specialization among the staff, amount of staff, etc., make it probable that the college has at least some 25000 students, a large part of whom can be assumed to come from Kenya.

The standard of the courses and of the tuition has not been ascertained by the educational authorities in Kenya (or Tanzania and Uganda). Nor is the student drop-out rate known. Indubitably, however, the B.T.C. has proved that correspondence education is a feasible and economical proposition in East Africa, and also that the popular demand for education by correspondence is considerable.

4.2. Kenyan Interest in the Proposed Seminar - Recommendations

4.2.1. There is a keen interest in Kenya in the proposed seminar "The Use of Correspondence Instruction in Adult Education. Means, Methods, and Possibilities". An introductory training seminar of this kind would be a very welcome opportunity for preparing the work of the correspondence course unit.

4.2.2. It is therefore recommended that invitations to the seminar be sent to the Ministry of Education, Nairobi, and the University College (Institute of Adult Studies). The Ministry should be invited to send one participant, who should be one of the officers who in his daily work would be associated with the correspondence course unit. The Institute of Adult Studies, being more directly involved in the preparation and administration of correspondence courses, should be invited to send three participants. They should be persons who in the coming three - four years could be expected to be on the staff of the Institute. Some years' previous experience of adult education in East Africa should also be made a necessary qualification. Kenyan nationality would be desirable, but should not be made a condition.

4.2.3. Problems that should be specially treated at the proposed seminar are, from a Kenyan point of view:

1. The question of English (a second language) as a written medium of instruction on the secondary level. How is remedial language training best given by correspondence in Africa?

2. Free pacing or paced correspondence instruction? Implications and pre-requisites.

3. The rôle of radio and ETV in connection with education by correspondence.

4. Programmed instruction and correspondence courses - the method of preparing effective self-instructional material.

5. The economics of education by correspondence. Effective administrative routines, mailing procedures, etc.

4.3. Correspondence Education for Upgrading School Teachers to University Level - Recommendations

4.3.1. Teachers are in Kenya trained by three different institutions: Kenyatta College, the Kenya Science Teachers College, and University College. Correspondence education could be used for upgrading to university level the teachers turned out by these three institutions. This suggestion, made by Mr F.L. Bartels of UNESCO, was discussed in Kenya with the authorities concerned.

4.3.2. There is a consensus of opinion between the Principal of University College and the Principal of the Kenya Science Teachers College (KSTC) that some form of further training by correspondence for the graduates of the college would be feasible, and even desirable for several reasons. A gradual Africanization of the Swedish expatriate staff of the KSTC presupposes the training of Kenyans to take over, and the former pupils of the KSTC are natural choices for such a training. But the extreme shortage of science teachers in the country would not make it economical from the point of view of national development to take the new science teachers out of the schools for an additional, lengthy period of training up to degree level. But by upgrading the new teachers on the job by correspondence, it would be possible to reduce the period of their attendance at university to perhaps one and a half to two years.

Then, too, the establishment of a joint correspondence education project would mean the creation of a link between the KSTC and the University College. Such a link does not exist at present; the KSTC is independent of the University College. This is not a satisfactory state of affairs, because it means an unnecessary duplication of efforts and the raising of an artifical barrier between the two institutions, whose work have many points of contact.

4.3.3. At Kenyatta College the need for upgrading by correspondence of newly turned out teachers to the university level is not so strongly felt. Correspondence education would, in the view of the college, only emphasize a present tendency in Kenya to overestimate the value of a formal, academic type of education. A suggestion that the pressure on the college staff - at present the staff members carry a very heavy burden of work - could be lessened and the capacity of the college expanded by the use of supervised correspondence instruction for some parts of subjects was also considered undesirable as regards Kenyatta College. The use of self-instructional material of this kind for carrying a part of the tutor's educational load would be limited in teacher training, where the face-to-face, personal contact of tutor and student is very important, it was stressed by the spokesman of Kenyatta College.

4.3.4. The idea of using education by correspondence augmented with radio and/or ETV broadcasts or face-to-face sessions for post-teacher training and teacher upgrading was considered feasible by the Institute of Education, which has also supported the plans for establishing a correspondence course unit as part of the Institute of Adult Studies.

4.3.5. It is thus recommended that the possibilities be investigated of developing a correspondence extension of, to begin with, the Kenya Science Teachers College, offering Mathematics and science subjects by correspondence up to the level of second year university studies. The courses should be administered by the Correspondence Course Unit of the Institute of Adult Studies and developed by the University College and the Kenya Science Teachers College in collaboration. This project, if reasonably successful, could become the nucleus of a more comprehensive post-teacher training by correspondence; the science subjects would even as far as KSTC graduates are concerned have to be supplemented by courses in arts subjects.

For the purpose of preparing the courses, two science lecturers, one of whom should have Mathematics in his degree, should be seconded by the University of Uppsala to the University College, Nairobi. The lecturers should also be expected to teach at the University College and at the Kenya Science Teachers College in their subjects. This teaching should, including preparation time, not take up more than half their working hours, but is essential. It would enable them to study the academic level and student standards at both the enrolling and the receiving end of the proposed correspondence education programme.

4.4. Other Correspondence Education Requirements in Kenya - Recommendations

4.4.1. Kenya's decision to launch a national correspondence education project, although already backed by foreign aid, raises the question of subsidiary needs.

4.4.2.1. The mention of programming in a report on correspondence instruction may seem strange at first sight. Yet, there is a connection. Education by correspondence requires the use of self-instructional material (cf. definition in 1.1.). Programming, understood as an educational methodology and "philosophy" rather than as the production of orthodox linear or branching programmes, represents perhaps the most systematic and consistent approach yet used for the preparation of self-instructional material. Any efficiently produced, modern material for self-study must, therefore, to some degree, conform to the basic principles underlying programmed instruction, even if the result happens to be something other than a "regular" programme.

It is inevitable that the use of programming must lead to the production of better and more effective correspondence courses. To some extent this has already happened; directly or indirectly programming today has an influence on correspondence education appreciated by some correspondence educators and resented by others but quite natural and beneficial. If the correspondence educator of today already must be versed in and learn to apply the fundamental techniques of programming in order to do a better job, this is even more true of the correspondence educator of tomorrow, whose whole outlook promises to be determined by the "philosophy" of programming.

Therefore, a new correspondence education project in a rapidly developing and forward looking state should be supplemented by a basic training in programming. This would be of value not only to correspondence education but to other kinds of training as well, in Kenya for instance the type of training offered at the Kabete Institute of Administration.

4.4.2.2. It is accordingly recommended that a specialist on programmed instruction be appointed to the Department of Education, University College, Nairobi, for a period of two to three years. His task would be to train educational personnel in programming techniques and advise educational institutions in Kenya on the production of self-instructional material and the planning of training schemes.

4.4.3. Good correspondence courses usually make excellent text-books that can be produced at very little extra cost. Especially in a developing country like Kenya, where there is a great demand and need for educational literature, an indigenous text-book production as a by-product of correspondence education could have an impact on the educational situation. The sale of correspondence courses in a text-book version would also help to finance the Correspondence Course Unit which, according to the plans, should be self-supporting.

4.4.4.1. Two major expenses would have to be met by Kenya, despite AID aid, during the initial four year period. They are the cost of buildings, and the cost of supernumerary staff salaries and administrative overheads.

Additional help would have to be sought to cover these expenses, wholly or partly, from other outside sources. No realistic estimate of both these costs has yet been prepared, but can be expected within the near future.

4.4.4.2. It is thus recommended that the question of financial aid to the Institute of Adult Studies be discussed with the Institute, with a view to facilitating the establishment of the Correspondence Course Unit.

5. Tanzania

5.1. The Present Rôle of Correspondence Education in Tanzania

5.1.1. There is no national, comprehensive correspondence education project in Tanzania. Nevertheless, Tanzania is the only of the three East African countries where an organization already does exist that uses education by correspondence, geared to development needs within a special sector of the economy: the Cooperative Education Centre at Moshi.

Apart from this centre, only correspondence education on a commercial basis is available in the country.

5.1.2.1. The cooperative movement has a key position in Tanzania's predominantly rural economy. The cooperative unions have about 2 million members (roughly one fifth of the total population), and practically the entire Tanzanian export of agricultural products is farmed by cooperative societies. The basis of the cooperative movement is the primary society. There are about 1500 such primary societies, practically all of which are organized in unions.

One of the most important tasks of the cooperative movement in Tanzania is the education of its members, especially in subjects directly related to the work of the cooperatives, for instance Bookkeeping, Auditing and Commercial Arithmetic. Knowledge about the aims, organization and methods of cooperative societies is also obviously essential to the smooth and efficient functioning of the nationally very important primary societies. The appointment (and training) of one person in every primary society as Cooperative Educational Secretary of that society is therefore one of the major goals of cooperative education in Tanzania today; the Cooperative Educational Secretariés would be responsible for and organize the local cooperative educational activities. This objective has not yet been reached, but it is hoped that an organization of this nature will be gradually created within the near future.

The chief centre of cooperation in Tanzania is Moshi, in the Kilimanjaro area, where coffee growing cooperatives have a long tradition and are firmly established. The Kilimanjaro area is also one of Tanzania's most densely populated. Not unnaturally, therefore, Moshi is the base of cooperative education in the country. The Cooperative College and the semi-independant Cooperative Education Centre, both located at Moshi, are the principal educational institutions of the Tanzanian cooperatives.

5.1.2.2. The work of the Cooperative Education Centre (CEC) is concerned with four categories of people:

1. Staff of primary societies.
2. Committee members.
3. Members.
4. The general public.

During the about two years that the CEC has been active, it has devoted itself to the first three of these categories and mainly to the first. For the public at large (in the first instance MP´s, teachers, members of TANU, trade unionists, etc.) courses on cooperation are being discussed and projected, but can not be realized before 1967. Most of CEC´s activities have been directed towards the staff of primary societies, and towards committee members. The range of the centre covers correspondence education, one week face-to-face courses, day courses, radio programmes, and regular articles on cooperation in a local newspaper.

5.1.2.3. More than 1200 correspondence students are now enrolled with the CEC, which produces, administers and has marked students´ assignments (in collaboration with teachers of the Cooperative College.) The basic course, one on cooperation, comprises ten lessons, the last five of which deal with the fundamentals of Book-keeping. Another of the courses already produced is about credit unions, and one is a primary course in Book-keeping. The basic, introductory course on cooperation is already available in both Swahili and English, and an extended use of Swahili has been decided upon. Courses projected or under production include an advanced course in Book-keeping, Commercial Arithmetic, Auditing, Duties of Inspection, Management, and Law (practical and fundamental aspects). Many primary society members have only Standard VI or VIII education at the most, and it is the CEC´s wish to create a system of correspondence courses in more general subjects, i.e. others than ones of specific interest to cooperation.

5.1.2.4. The students´ fees for the correspondence courses is purely nominal and practically only covers the cost of marking assignments (at present the marking cost is 2/- per assignment). The fee for the basic ten lesson course is for instance 20/-. The centre is financially and otherwise aided by the Swedish cooperative movement, whose main educational principles and practises it parallels.

5.1.2.5. Itinerant teachers and instructors hold one week face-to-face courses in the districts for the staff of primary societies, and one-day courses for members. The longer courses are generally based on the correspondence lessons and their questions.

5.1.2.6. The CEC has given some very appreciated radio programmes, but its broadcasts are not yet regualar. Study and discussion groups using the correspondence courses have been formed in different parts of Tanzania. The work of the groups has not yet been followed up, however, and it is too early to say if this form of correspondence education is feasible in Tanzania or not. (In Sweden - where roughly 10 % of the total population studies by correspondence - it has been extensively used, not least by the trade unions and the cooperative movement. Since the early 1920´s, more than 3 million Swedes have studied by "group correspondence" alone).

5.1.3. An estimated 7000 Tanzanian residents are currently enrolled with the British Tutorial College, the dominating commercial correspondence school in the country. In Tanzania, as elsewhere in Africa, to the ambitious middle range manpower group education by correspondence represents an opportunity of combining the advantages of a salaried employment with the benefits of further study for promotion or higher salary. De facto there thus already exists a not inconsiderable body of correspondence students in Tanzania. The relative success of these students, i.e. the drop-out rate, is not known. However, it is very probable that the return on the investment in education represented by the students´ fees is probably much less than the country can afford. It is at all events uncontrolled; an already substantial and potentially even more important educational contribution towards a swift development of the national economy is left entirely under the influence of market mechanisms, the working of which may or may not be in line with the national endeavour.

In a country where so much constructive thought, imagination and foresight have gone into educational development planning, it is therefore somewhat surprising to find that steps have not yet been taken to establish a national correspondence education programme. One of the main reasons for this deficiency is scarcity of resources and the subsequent need to choose educational priorities; there is a very understandable reluctance to risk the achievement of development plan aims by diverting any national efforts into hitherto untried and perhaps abortive channels. This does not mean, however, that interest in education by correspondence does not exist or is very weak. Particularly in the field of adult education its possibilities are realized, and its use has been discussed by adult education institutions for some years.

5.2. Conditions for Correspondence Education in Tanzania

Any national correspondence education project in Tanzania would have to comply with certain conditions in order to relate it to economic and educational realities and to development needs.

1. A correspondence programme would have to contribute actively towards implementing the current development plan and must align itself to the country's manpower development priorities.

2. A correspondence education project must back up the work already being done by existing institutions and help them to reach their goals.

3. Tanzania cannot at present divert any funds or senior personnel towards a correspondence education project; a national correspondence education programme before the early 1970's at the earliest is therefore impossible without outside help to cover both capital investments, senior staff and running costs for about ten years.

4. To give maximum help and also to insure against complete failure, a Tanzanian national correspondence education project should be multi-purpose, i.e. combine several different activities apart from correspondence education in a narrow sense, for instance set up a postal library service for correspondence students and/or assist in the production of follow-up and other literature of an educational nature.

5. A multiple approach should be used. The correspondence instruction proper should be coupled with face-to-face classes and courses, radio broadcasts, visits from itinerant tutors, simple audio-visual aids (where possible), and group study.

6. Lesson material should as far as possible be written in Tanzania and even given a "local flavour" when used predominantly in one area. An extensive use of Swahili would broaden the programme and partly eliminate the language difficulties which arise when English is the medium of instruction.

7. Courses should not be mainly "academic". They should be geared to practical goals, and some should be so simply written and so elementary in subject matter that they can be studied by newly literates. The highly sophisticated type of correspondence course should be deliberately avoided.

8. The writing of each course should, as much as practically possible, be preceded by a survey not only of the national needs (cf. for instance the Tobias Manpower Survey Report) but also of the popular demand for and interest in the course.

9. A national correspondence education organization in Tanzania must print its own materiel.

5.3. Educational Problems and Needs

5.3.1. Education, and adult education in particular, has been assigned a major rôle in the socio-economic development of Tanzania. The following passages from the current five year plan sum up the country's point of view:

"In the achievement of these objectives, education must play a major rôle. If one of the objectives is to be self-sufficient in trained manpower by 1980, a carefully planned expansion of education will be necessary. This expansion is an economic function: The purpose of the Government expenditure on education in the coming years must be to equip Tanganyikans with the skills and the knowledge which is needed if the development of this country is to be achieved. First, we must educate the adults. Our children will not have an impact on our economic development for five, ten or even twenty years. The attitudes of the adult, on the other hand, have an impact now. The people must understand the plans for the development of this country: They must be able to participate in the changes which are necessary. The expanded expenditure on Agricultural Extension work, on Community Development, and also the new scheme for adult education are all part of this preparation of ourselves for the work we have to do".

5.3.2. The general educational situation is characterized by three features: the very high - and well-founded - priority given to Secondary Education, a dearth of well qualified Tanzanian teachers on the secondary but also, to a lesser extent, on the primary level, and the mounting numbers of unemployed primary school leavers.

5.3.2.1. Tanzania has probably more purposefully than any other East African country concentrated its efforts on Secondary Education and the achievement of the targets set by the 1961 Addis Ababa conference: a 30% enrolment of the secondary school age group. Despite this, actual enrolment figures will not rise as swiftly as would be desirable, owing to the large size of the age group and to the present population growth. Nevertheless, a substantial increase is expected during the span of the present five year plan: an increase from 13 to 27 schools offering Form VI instruction, and from 680 enrolments in Higher School Certificate courses to 1280. At present there is little risk of the economy not being able to absorb the secondary school leavers.

5.3.2.2. The services of expatriate Secondary school teachers are and will be needed for some years to come in Tanzania; in the past this category of teachers was not trained in the country, and the establishment and development of domestic training centres must necessarily take time. Determined efforts are also being made to raise the standard of Primary school teachers. In the field of teacher training there will, however, be a great need for complementary efforts over a long period of years to come.

5.3.2.3. The problem of unemployment among Primary school leavers, topical throughout East Africa, is very much felt in Tanzania. In 1965, nearly 47,000 children completed primary school education. Only 6000 of them secured places in post primary institutions. One out of ten new entrants in the labour market can count on wage or salary employment.

It is open to discussion whether vocational training, curriculum or other reforms would appreciably ease the situation. Only an estimated 100000 new jobs will come into existence during the entire life span of the Five Year Plan; apart from farming there are very few opportunities indeed open to the more than 1,000,000 Primary school leavers expected to be turned out during the same period.

The possibility of giving the primary school curriculum a heavy agricultural bias in order to afford a more realistic approach to the problem does not seem very feasible. It would entail, among other things, a special retraining of all active teachers and radical changes in future teacher training, as well as practical alterations in the school buildings and grounds.

In its implications, the school leaver problem is not only political, social and economical. It is also a problem of adult education; many of this group of students find their way to evening classes, adult education institutions and correspondence schools (cf. Appendix 4). Cf. also 2.7.

5.4. Adult Education in Tanzania - a Brief Outline

5.4.1. The overall responsibility for adult education in Tanzania rests with the Ministry of Community Development and National Culture. Other ministries directly or indirectly concerned with some aspect of adult education are Education, Agriculture, Health, Commerce and Cooperatives, and Labour. Primarily engaged in adult education work are the Institute of Adult Education (University College), and Kivukoni College.

Representatives of these ministries and institutions, together with representatives of for instance TANU, the trade unions (NUTA), voluntary organizations, the Tanganyika Education Trust Fund, the Red Cross, etc., constitute the National Advisory Committee on Adult Education, the chairman of which is the Minister for Community Development and National Culture.

5.4.2. The chief objectives of adult education in Tanzania are:

1. to raise the level of literacy
2. to install new concepts and teach new skills
3. to further the social and economic development of the country
4. to provide opportunities for further education.

5.4.3. The organization of Tanzanian adult education is apparent from the diagram, Appendix 4. It will be seen from the chart that the two main recruitment bases for adult education are the newly literates and primary school leavers. They are fed into district training centres, Kivukoni College, the centre at Rungemba (which has an adult education wing providing courses for women), The Institute of Adult Education - University College, and the Community Development Training Centre at Tengeru, which specializes in community development training and training in adult education.

5.4.4. Provision has been made for setting up 30 District Training Centres during the present five year plan. At present about one fifth of these have been established. Their function is to run residential courses, reinforce the training given by Village Training Centres, and in general act as focal points of the community's intellectual and cultural life.

5.4.5. The Institute of Adult Education (formerly the Extra-Mural Department of the University College) provides part-time and full-time courses for adults in Dar es Salaam and wherever practicable in

Tanzania as a whole. It is also to act as a centre for adult education research and assist other organizations when called upon to do so in the preparation of syllabuses and programmes for adult education courses.

The Institute is housed in a down-town centre of the University College, a modern five-story building with excellent administrative and classroom facilities. Some 170 courses were held in 1965 covering a large range of subjects, for instance Economics, Languages, Adult Teaching Techniques, Public Administration, African History, etc. The average annual enrolment is between 4000 and 5000 students.

A diploma course in adult education, geared to the needs and conditions of Tanzania, is being prepared, and a relatively comprehensive Adult Education library has recently been added to the Institute.

In the country, too, the Institute is active. Resident tutors are stationed at Moshi, Mwanza and Mbeya, and the addition of three more resident tutors to the staff of the Institute is anticipated shortly.

5.4.6. Kivukoni College was set up in 1961 by the Tanganyika Education Trust Fund, backed by popular contributions throughout Tanganyika. The first course at Kivukoni College, which is residential, comprised 35 students. In 1965 the number admitted had grown to 70. The background of the students has, however, remained much the same; one of the chief aims of Kivukoni College is to give further training to potential leaders within TANU, the trade unions, the civil service, and the teaching profession.

The medium of instruction is practically entirely English, although a greater use of Swahili, where possible, is being planned. (One of the deterrents to teaching in Swahili is the lack of advanced text-books in this language).

The courses held at Kivukoni College are normally of eight months' duration, but short courses, ranging from one to seven weeks are also run. Week-end courses aimed at otherwise heavily engaged, fairly senior officials have proved successful. Among the subjects dealt with in this way are "The Five Year Plan" and "African Socialism".

The content of the long, "main" course is aimed at giving citizenship and leadership training. Among the subjects are for instance Agricultural Economics, Industrial Development, Economic Development, Communications, East African History, Public Relations, and

Geography. Kivukoni College resembles a Scandinavian Folk High School not only in its general aims but also in that it does not give certificates or hold examinations.

Kivukoni College runs a regular radio programme, Liambie Taifa ("Tell the Nation"), which deals with subjects like "Taxes and Development", "Educational Development", "The Business of Farming", "Developing the Home", and "Labour Legislation". These programmes and Kivukoni´s monthly newsletter Mbioni have proved very popular. (Incidentally,the development of the radio programmes and the newsletter into a regular correspondence education system has been seriously discussed at Kivukoni College).

5.5. Interest in Correspondence Education

5.5.1. There is a positive and genuine interest in the possibilities of correspondence education for adults at the Ministry of Community Development and National Culture, the Ministry of Agriculture, the Institute of Adult Education and Kivukoni College, i.e. practically all the chief government and university institutions engaged in adult education.

5.5.2. The Ministry of Education is not primarily responsible for adult education proper, which would make its interest limited in the proposed seminar on "The Uses of Correspondence Instruction in Adult Education. Means, Methods, and Possibilities." Teacher upgrading and teacher training is, however, one aspect of adult education which does have an immediate bearing on the work of the Ministry and which would be treated at the seminar.

5.5.3. Over the past few years, several suggestions have been made to the Ministry of Education, for instance by US AID, that one of the solutions to Tanzania´s teacher training and teacher upgrading bottleneck problem would be to introduce a large scale correspondence education programme targeted at the teachers. There are many precedents for this from other parts of the world. The present UNESCO/UNRWA teacher training programme in Syria, Jordan and Lebanon can be cited as a recent example of such a scheme in developing countries.

But in Tanzania there are under the present Five Year Plan no Ministry resources that could be directed towards the implementation of such a programme. Financially and from a manpower point of view even a pilot project involving any form of Ministry participation would be out of the question.

5.6. Proposed Seminar - Recommendations

5.6.1. One of the pre-requisites for a comparatively large Tanzanian participation in the proposed seminar - which would be desirable for several reasons - is that some follow-up in the form of a correspondence education project exists in Tanzania, apart from the important but relatively specialized work done at the Cooperative Education Centre. (Such a project is outlined in 5.7.)

5.6.2.1. Given follow-up possibilities, the following institutions should be invited to send one representative each to the proposed seminar "The Use of Correspondence Instruction in Adult Education. Means, Methods, and Possibilities.": The Ministry of Community Development and National Culture, the Ministry of Education, the Institute of Adult Education, Kivukoni College, and the Cooperative Education Centre, Moshi.

5.6.2.2. If no correspondence education project in Tanzania can be envisaged within the next two - three years, the Tanzanian participation in the seminar should be limited to one representative appointed by the National Advisory Committee on Adult Education, and one representative of the Cooperative Education Centre, Moshi.

5.6.3. The representatives chosen should have some years' experience or first hand knowledge of adult education, mass education or teacher training/upgrading in Tanzania. They should be expected to be in some way connected, directly or indirectly, with any possible future correspondence education project in Tanzania. Tanzanian citizenship should be desirable but should not be made an absolute condition.

5.6.4. The purpose of the seminar for Tanzania would be to discuss the basic principles and methods of education by correspondence and how they can be applied to Tanzania. Special prominence should be given to the following questions:

1. Group study by correspondence.

2. Correspondence instruction in combination with residential courses and/or radio.

3. The use of correspondence instruction techniques and feedback to provide follow-up teaching for newly literates.

4. The rôle of District Training Centres in a Tanzanian national correspondence education scheme.

5. Correspondence instruction for teacher training and teacher upgrading.

6. Correspondence instruction and priorities, policies and planning in a developing country.

5.7. Outline of a Correspondence Education Project - Recommendations

5.7.1. A pilot project involving the use of correspondence education is feasible in Tanzania. Physical communications are generally good enough not to make this kind of instruction impossible. The Cooperative Education Centre, for instance, enrols students from all over the country and has found the communication difficulties managable. Similar inferences can be drawn from the success of private correspondence schools in Tanzania. The problem of using English as a medium of instruction on the secondary and higher levels does exist, but is not much worse than in for instance Kenya or Ethiopia. Courses in Swahili could also very well be developed to get round this language difficulty. Working with material prepared in Swahili would, however, necessitate access to a fairly large group of qualified part-time or whole-time Tanzanian staff.

5.7.2. The main adult education organizations in Tanzania would welcome and be prepared to support a correspondence instruction project within the field of adult education. Provision has also been made for instruction by correspondence in the People's Education Plan, an adult education plan which it has not yet been able to implement. The Second Vice-President of Tanzania, Mr. Rashidi Kawawa, who as Chairman of the Board of Kivukoni College takes a very active interest in Tanzanian adult education, has in a private interview particularly stressed the possibilities a national correspondence instruction project would have for adult education in Tanzania. His view is backedup by representatives of the Institute of Adult Education, Kivukoni College, the Ministry of Community Development and National Culture, the Ministry of Agriculture, and the Tanganyika Education Trust Fund.

Any correspondence education programme in Tanzania should thus primarily be directed at augmenting and supporting the work already being done by these institutions. When an administrative platform for correspondence education has been created, it would have to serve all interested ministries and organizations. Indirectly, preparations would therefore have been made for teacher training by correspondence, when the resources of the Ministry of Education will allow this.

5.7.3. A correspondence education project aimed specifically at adult education would, as has been shown in 5.3.1., be in line with the current Five Year Plan. The courses should be geared to the everyday needs of the population. Tanzania being chiefly a rural country, this therefore means that the courses should be centred around the life and needs of an agrarian community. They should give instruction in for instance agricultural subjects, Health and Sanitation, Water Development, Rural Development, Civics and Citizenship, Practical Arithmetic and Mathematics, Swahili, English and General Science. The courses should be aimed at supplying literate adults on all levels, and particularly school leavers, with extended educational facilities. (Cf. Chapter 2.7 of this report).

The recruitment base of the system as a whole should be as broad as the circumstances allow. Thus, a limited pilot project on a small scale only - which must be the first step anticipated - should have in it the seeds of downward growth as well as the ability to develop in other directions.

5.7.4. Probably the Western system of individual correspondence study is less well adapted to the African way of life than group activity. To a large extent, therefore, the correspondence courses should be reinforced not only by radio broadcasts but also, if possible, by study groups and face-to-face sessions. The students could for instance be gathered for an initial one week course at a local centre, preferably a District Training Centre, when they would be introduced to the method of correspondence study and given elementary training in study techniques. The content of the initial course material could be discussed, and a timetable for the course as a whole worked out. The group would then disperse, possibly forming small local study circles of four to five people. After two or three months the whole group could meet again for a short session of "conventional" classes. (The latter may not be possible. An experiment with a combination of correspondence instruction and residential, final courses has not been successful in another African state, Zambia. As a matter of principle, a dogmatic adherence to preconceived theories of what is feasible or "best" should not bind a correspondence education project in Africa. One of the great advantages of instruction by correspondence is its flexibility, its ability to function in many different ways and under very different conditions. This advantage must not be lost by insistance on any particular pattern, developed in an another part of the world and for a different society).

5.7.5.1. The existing systems of adult education must be the foundations on which to build a pilot project in correspondence education. The District Training Centres, the residential tutor system of the Institute of Adult Education, and the Kivukoni College residential courses should all be brought into the correspondence teaching structure.

5.7.5.2. District Training Centres could serve as course headquarters, where possible, for correspondence study group meetings, for instance for initial face-to-face instruction. Wardens of District Training Centres could also act as local representatives of the correspondence organization and would be able to give advice or help to many students. This applies also to the residential tutors of the Institute of Adult Education and to ex-Kivukoni students, where this is feasible.

5.7.5.3. Apart from the correspondence programme itself, the correspondence courses could be used as follow-up material (without feedback) and as the nucleus of a simple "do-it-yourself" library - not only at the DTC's but also in the shambas of the literate people of the district. (This material would have to be available at a nominal cost only). Everyone who has completed a course should, to this end, receive a fresh copy of the course in a simple, strong binding, if this is at all possible. Supplemented by a postal library service for correspondence students, such an arrangement would mean greater chances of a decisive impact for the correspondence programme as a whole on the educational development of the country.

5.7.5.4. The correspondence organization should initially produce and in their name administer courses for both the Institute of Adult Education and Kivukoni College, in which case the IAE residential tutors and the Kivukoni short courses would be essential to the correspondence programme. It would for instance be possible for the Institute of Adult Education to offer some of its courses by correspondence, thus making the Institute independent of the quality and numbers of local teachers available for particular, short-term courses. It would be the responsibility of the resident tutor to administer these correspondence courses locally and to give individual students guidance and advice.

The correspondence organization might even find it possible to develop its own system of itinerant tutors.

By linking up with the Institute and Kivukoni College and indicating that the courses had been planned in close cooperation with and was being run for these institutions, a correspondence organization would probably very swiftly gain popular acceptance. The work of both is well known and very appreciated, and Kivukoni College, having been set up by a voluntary national effort, has an especially emotionally strong position in the country.

5.7.6. Provision should be made at the very outset for a continuous evaluation of the correspondence education programme.

5.7.7.1. Initially the pilot project would be aimed at Primary School leavers and could:

a) Extend the present facilities of the Institute of Adult Education and Kivukoni College, using the material and staff already available at both these institutions. (The radio programme and Mbioni, the monthly newsletter of Kivukoni College, already provides the embryo of such a correspondence programme, and the Institute of Adult Education has in its files a wealth of lecturer's notes, syllabuses, etc., which could be utilized for correspondence courses.)

b) Two to three agricultural courses run in cooperation with the Ministry of Agriculture as an experiment.

c) A postal library service (The Tanganyika Library Service already offers postal facilities; a direct link could perhaps be established between it and a correspondence organization.)

d) Three - four follow-up "correspondence courses" for newly literates run as an experiment for the Ministry of Community Development and National Culture.

Courses in cooperation should, as hitherto, be handled by the Cooperative Education Centre.

5.7.7.2. Outside aid for the project would be in the form of expatriate specialists, capital equipment, and to cover running costs (including salaries to the Tanzanian staff and rentals). The expatriate staff would have to include:

a) an educationist with long experience of the planning, writing, and editing of correspondence courses,

b) an expert on the administrative routines of correspondence education,

c) a course editor,

d) a secretary/typist.

The establishment of a special library service, if a close co-operation with the Tanganyika Library Service proves unfeasible, would require a trained librarian (who could very well, just as for instance the course editor and secretary/typist, be a Peace Corps volunteer).

5.7.8.1. The question of institutionalisation in connection with a correspondence education opens up three alternatives:

1. Establishing a correspondence unit under the Institute of Adult Education.

2. Establishing a correspondence unit under Kivukoni College.

3. Establishing a correspondence unit under the Tanganyika Education Trust Fund, i.e. in practice an independent organization. (The Tanganyika Education Trust Fund, which set up Kivukoni College, is a dormant organization. It does,however, have considerable prestige. The chairman of its board is Dr. Julius Nyerere.)

5.7.8.2. For both alternatives one and two speak the fact that the organizations mentioned have the experience, material, and staff that would be necessary for the development of correspondence courses, and both institutions offer the advantage of an existing board, organization and a well established and respected name. They are both institutions whose work any adult education correspondence organization would have to supplement and whom it would have to serve (together with for instance the Ministry of Community Development and National Culture). A relatively close association with Kivukoni College was particularly recommended by many of this report's spokesmen.

5.7.8.3. A correspondence organization under the Tanganyika Education Trust Fund would, on the other hand, be more "neutral"; its position as a common service unit would be more stressed. As correspondence organizations, if successful, usually tend to grow very rapidly, it might cause embarassment to an existing institution to have a correspondence unit as part of the administrative structure. (This point has been made by the Director of the Institute of Adult Education, who has recommended this solution as the most practical and satisfactory.)

5.8. Office and staff accommodation would be available for instance on the premises of Kivukoni College, Dar es Salaam, which could also, in a preparatory phase, place some of its administration at the disposal of the correspondence organization. Initially, offices could also be provided by the Institute of Adult Education.

5.9. The financial implications of the project are shown in Appendix 2 (B) of this report.

5.10 It is thus recommended that a correspondence education pilot project be established in Tanzania, in accordance with the outline given in this report. The project would be essential as a follow-up activity for Tanzanian participants to the proposed seminar, and should enter upon its preparatory phase as soon as possible after the termination of the seminar.

6. Malawi

6.1. Correspondence Education in Malawi

6.1.1. Malawi has had an actively functioning correspondence college under the Ministry of Education since the beginning of 1965. The college has been established under the Commonwealth Education Scheme, with help from New Zealand and Australia; these countries have provided money for equipment and also defray the costs of the New Zealand and Australian expatriate staff. Assistance in setting up the college has also been given by the Gulbenkian Foundation, UNESCO and the United States Peace Corps, a few of whose volunteers have been assigned to the college, among them a librarian.

Some of the courses have been written entirely in Malawi, but a majority of them have been adapted from courses placed at the disposal of Malawi by the Central African Correspondence College, Salisbury.

The staff of the Malawi Correspondence College comprises more than 30 persons, six of whom are course editors. Some 30 part-time tutors are employed. The college, which at present has about 2600 students enrolled, also runs a 45 minute radio programme five days of the week during the school terms. Recently too, it has started a postal library service as a complement to its regular activities. Since its inception, it has been growing rapidly not only in terms of students but also in importance; the Ministry of Education has placed most of the recognized evening schools in Malawi under the correspondence college and utilizes its printing department for work outside the normal responsibilities of the college.

An interesting direct result of the college's activities is that one of the correspondence courses in a vernacular is the first written material for the African population in the language; previous grammars were written by Europeans for Europeans wishing to learn the vernacular as a foreign language.

6.1.2. The Malawi Correspondence College offers courses for the Primary Leaving Certificate, Junior Certificate, General Certificate of Education, and City and Guilds Intermediate Examination.

The subjects in the Primary Leaving Certificate are English, Arithmetic, Rural Science, Nyanja or Tumbuka and "general subjects" (History, Geography, Civics). The correspondence students sit for the same examination as Standard 8 school pupils.

The Malawi Junior Certificate Examination correspondence course also covers the same syllabus as the secondary schools, and the correspondence students sit for the same examination as ordinary secondary school pupils. The subjects offered by correspondence are English; History; Geography; Mathematics; Nyanja or Tumbuka; General Science; Health Science; Religious Knowledge; Commercial Arithmetic; and Bookkeeping. Students may enrol for any number of subjects, but they are recommended to enter for the full J.C. course of six subjects, three subjects at a time, sitting for the J.C. examination in their first three subjects before studying their remaining three subjects.

Enrolment for the General Certificate of Education (University of London) is open to students who have reached Junior Certificate level. The Malawi Correspondence College prepares students for examinations in the following subjects: English Language; Mathematics; Biology; History of the British Commonwealth; Religious Knowledge; Human Anatomy, Physiology and Hygiene; European History; Economics; Geography; and British Constitution.

Students who have some previous technical training and have reached Junior Certificate level are able to enrol for a course in Brickwork or one in Carpentry and Joinery on the City and Guilds Intermediate level. Another course in this group, one in Motor Mechanics, is at present being prepared. Students entering for these courses have previous apprenticeship training and must be enrolled through official trade training authorities. The correspondence courses give theory only; the student is expected to have acquired the necessary basic practice before enrolment.

6.1.3. The correspondence courses are printed by a special department of the Malawi Correspondence College, which has two offset printing machines. A typing pool of four to five persons prepares the pages for printing, and the off-set plates are produced by photographic means.

The correspondence lessons, at the Malawi Correspondence College called sets, generally have self-check exercises. Only every second or sometimes third, however, has assignments to send in for marking. Some of the courses have 12 sets and others 30. Altogether, some 600 sets have been produced by the college.

When the marked answers to assignments (called "tests" at the college) are returned to the student, a model answer sheet is always enclosed.

Many of the courses are entirely self-contained, but many also require that the student studies a text book or has an opportunity of consulting atlases and reference literature. Such necessary text books are supplied to the student free of charge.

6.1.4. The fee paid by the student naturally varies according to the level of the course and the amount of subjects studied. Payments can be made by instalments, which is by far the most common practice, £ 12.0.0. is the fee for enrolling in six subjects for the Junior Certificate, if an instalment system is requested. A full GCE course of five subjects costs £ 20.0.0. by instalments. In addition, the student must pay the regular examination entrance fee, which for the JC is 10/- a subject and for the GCE £ 1.0.0. plus 15/- a subject. 1/6 is paid to markers per assignment.

The college is not yet self-supporting, but the students' fees cover a large part of the administrative costs. It is particularly significant that Malawi, one of the poorest of the new African states, has been able to afford a comparatively elaborate correspondence education programme. Naturally this would not have been possible, if outside agencies had not provided the necessary equipment and expatriate staff (originally one person only, and now not more than a handful). But the experiences made in Malawi show that even a not entirely self-supporting correspondence school is within the economical means of an African state.

6.1.5. In the original plans for the Malawi Correspondence College provision was made for study groups to be formed, and many were actually gathered. These groups were to meet regularly for discussions, chiefly in connection with the college's radio broadcasts. This experiment has, however, not been a success and has been discontinued.

The groups proved to be more heterogeneous than anticipated, and very little group spirit developed. Most of the members turned out to be very little interested in either participating in group discussions or listening to the radio broadcasts together with the group. Their main reason for attending the group sessions was in many instances only to receive help or advice when they were in difficulties with their studies.

A special question sheet has now been introduced as a substitute for the personal guidance the students could count on in study groups. Problems or difficulties are written on the question sheet, which may be sent to the correspondence college. The question sheets are answered by experienced teachers or by the staff of the college, if the questions are of a more general nature, and returned to the student.

This service does not, of course, involve any extra charge for the student. Short instructions on how to study have also been prepared and are sent to the students as a matter of routine.

6.1.6. The radio programmes of the Malawi Correspondence College are broadcast daily Mondays to Fridays during the school weeks. They are 45 minute programmes, generally given from 4.15 p.m. to 5.00 p.m. Repeat broadcasts of some of the lessons are on the air every Thursday at 8.15 p.m.

The intention is to create a complementary background to the correspondence lessons. The written lessons and the broadcasts are relatively independent of one another; the correspondence student can miss programmes without falling behind in his correspondence studies. Again, too, it is possible for others than regular correspondence students to profit from the radio lessons. The broadcasts expand on the written lessons and attempt to broaden the student's understanding and appreciation of the subject he is studying. They are regarded by the college as a means of maintaining student interest and stimulating the students in their work.

An indicative schedule of the radio programmes is included in this report as Appendix 5.

Study sheets and/or short, pamphlet-type companions are prepared for the broadcasts; the students are expected to follow the programmes actively and to prepare themselves for them.

6.1.7. One of the difficulties encountered by the Malawi Correspondence College is that the students' reading outside text-books is very limited, and consequently, too, their knowledge of English is often uneven. The inadequacy of library facilities and the average student's very limited economical possibilities of buying books partly accounts for this. But there is also an inability on the part of the student to understand the need to do more than study certain set text-books. The implicit conception on the part of the student is that of memorization learning rather than understanding.

In order to break down this resistance and to improve the general standard of English, while at the same time supplying much-needed library facilities, the correspondence college has recently opened a book-lending service. The scope and possibilities of this lending library is naturally still very limited, but a small stock of inexpensive paper-backs, serving the immediate needs, is available.

Individual requests cannot be dealt with, owing to the still insufficient resources. The student indicates by sending in a form that he would like to borrow books, and according to what he is studying he receives one book at a time from fixed lists. The books are to be returned to the college after a month. An addressed and franked return wrapper is supplied for this purpose.

The library service, which is run by a United States Peace Corps Volunteer librarian, is open free of charge to all enrolled correspondence students.

6.1.8. Some 600 to 800 of the students of the Malawi Correspondence College are enrolled in the night schools that have been taken over by the college. Since the Ministry's decision to effect this change in the work of the night schools was taken, a combination of regular correspondence study and conventional class-room instruction has been introduced at the night schools. The opinion of the Ministry is that this combination is very fortunate and has considerably improved the standard of the night schools in general. From the correspondence instruction point of view, too, the cooperation has been advantageous; it "humanizes" the work of the correspondence student and partly compensates for the lack of short residential courses and for the abortive group study scheme.

Not all the night schools work in the same way. A few do not directly relate their tuition to the correspondence courses; the student studies by correspondence at home and attends "normal" night classes in his subjects. This has the advantage of marrying two different approaches to the subject and two different methods - the student's knowledge becomes sounder, his understanding of the subject is deepened, and memorization learning is disencouraged. On the other hand, much effort is duplicated; this is a relatively uneconomical form of adult education.

A majority of the night schools, however, prefer to base their classes on the correspondence lessons themselves, expanding on them, explaining difficult parts and helping the individual student.

Whatever system is used, a certain standard of night school education is ensured; it is furthermore uniform throughout the country, even in districts where there are few qualified teachers.

6.1.9. Correspondence education has proved itself to be a feasible and comparatively economical proposition in Malawi. The Ministry of Education has, after a natural initial period of uncertainty, fully accepted teaching by correspondence and is even, as is apparent from this survey, successively widening its field of activity. Much of what has succeeded in Malawi can reasonably be expected to function as well in other African states.

Yet, it must be remembered that the geographical and demographical conditions in Malawi are particularly favourable to correspondence instruction. The country is comparatively small and has a population concentration in the south where communications consequently are fairly good. The time it takes for a letter or an answer to a correspondence student's assignment to reach its destination is not prohibitively long. Even postal communications from the northern parts of the country to Blantyre seldom take more than seven to eight days, in the experience of the correspondence college.

On the other hand, Malawi is hardly better off than most of its neighbours in other respects. The existence of many vernaculars has a negative effect on the ability to comprehend English; the general standard of education is still low, although progress has been made; both the country and the average citizen are far from rich; and the economy has a strong rural and agricultural bias.

6.2. Proposed Seminar on Correspondence Instruction - Recommendations

6.2.1. The Ministry of Education in Malawi is very interested in the proposed seminar on correspondence education. Although Malawi already has its own correspondence college and some experience in the field, a seminar would provide an opportunity of comparing notes and viewing what has been done in Malawi in perspective. The process of Africanization within the correspondence college would also benefit, if an opportunity of additional training were given to its staff. (An African is expected to be appointed soon, to replace the New Zealand organizer and present principal of the college.)

6.2.2. It is therefore recommended that an invitation be extended to the Ministry of Education, Zomba, Malawi, to send two participants to the proposed seminar on correspondence education. The Malawian representatives should, if possible, have experience of work within several different departments of the Malawi Correspondence College and should hold relatively senior posts within the college. The Malawian participants should be invited to describe at the seminar the routines and experiences of the Library Service, the night school activity, and the radio broadcasts of the college.

7. Zambia

7.1. Correspondence Instruction in Zambia.

7.1.1.1. Zambia is in the unique position, within the region dealt with by this report, of being the first country to enter upon a government correspondence education programme. Conceived as a pilot project, a Correspondence Course Unit was established by the Ministry of Education in May 1964. Its aims were to provide tuition at Junior Secondary level for a first intake of 150 students, and to collect information and experience for use in a possible later large-scale scheme.

The course was to prepare students for the examination in November 1965, the students were to commence studies at the same time and were to study a fixed number of subjects: English, Mathematics, History, Geography, Civics and General Science. The courses were written to comprise 30 lessons each, with the exception of English and Mathematics, which consisted of 60 lessons each. Half of these did not, however, have exercises to send in for marking, but were for practise only.

7.1.1.2. Provision was originally made for two residential courses to be held during the course. For this and other reasons, free pacing was not considered desirable; the students were required to observe a fortnightly schedule. English and Mathematics were to receive attention twice in the fortnightly study period, and the other subjects once. Lesson material was also despatched in regular fortnightly packages in accordance with the schedule.

One residential course was held at three different centres. The amount of work involved for the staff of the Correspondence Course Unit in preparing the residential course was formidable, and the cost was also very high - there were no extra charges for the cost of boarding and tuition, and fares were refunded to the students for return journeys. About a third of the students enrolled attended the course.

7.1.1.3. The intake of students in 1965, 100, was less than the previous year, but the intake was expanded considerably in 1966. The present number of students (June 1966) is approximately 500.

7.1.1.4. The original course material has been completely re-written in most of the subjects, in some cases twice; course writing has been and still is a major concern of the unit. The plans for expansion involve courses on the General Certificate of Education level, and the necessary subject courses are now being prepared.

7.1.1.5. In 1965, the first intake of students could be expected to have completed the course. Roughly a third of the number (41) completed all the assignments, and a majority of these students sat for the examination.

7.1.1.6. Originally located in Lusaka, the building of the Evelyn Hone College of Further Education, the unit moved in 1965 to Luanshya, near Ndola on the Copper Belt.

7.1.2. • Most of the Correspondence Unit's courses are of the self-contained kind although text books are needed in many cases. Special emphasis is laid on the enrolment procedures, which are selective. The application form is in itself used as an instrument of selection; apart from forming the basis for considerations regarding age, accessibility to the postal services, present employment, etc., it also contains a simple composition test intended to show the student's academic standards.

Advice on how to study is given to every student in a short pamphlet, and a Rapid Reading Course was prepared during the early phases of the unit's operations.

The Correspondence Unit does its own printing, using a modern off-set printing machine. Even colour printing has been successfully used. An electric duplicator is available for the reproduction of less important material.

The correspondence lessons usually contain self-check exercises, and much attention has been given to educational illustrations and the use of a simple, clear language. Model answers are sent to the student together with the marked answers to his assignments, making it possible for him to recheck his work.

7.1.3. The cost of running the Correspondence Course Unit is comparatively high, probably owing among other things to the relatively small stock of students. The fee paid by the student is £ 8.0.0., whereas the correspondence programme costs the Ministry about £ 26.10.0. per student and year. The unit will probably not come near to being self-supporting within the next few years, given the present limited range of courses and comparatively small annual intake of students.

7.1.4.1. There is no library service directly associated with the Correspondence Course Unit. The Zambia Library Service can, however, perhaps be said to cater in an indirect way for the unit; some of its book-borrowers may well be correspondence students. Its activities are at any rate relevant to the work of the Correspondence Course Unit.

7.1.4.2. The Zambia Library Service has a number of centres throughout the country and mobile units that change the assortment at the centres. Altogether, the Zambia Library Service has about 60000 books, of which about two thirds are non-fiction.

7.1.4.3. A development with a direct bearing on correspondence education is the growing popularity in recent years of the postal service of the Zambia Library Service. The amount of books posted on loan from the Zambia Library Service is currently about 200 a week, and the number is steadily increasing. The books are requested on special cards and are sent to the borrower complete with a franked special wrapping for returning the book, which is generally lent for a period of two months.

Significantly, most of the books borrowed in this way seem to be requested for examination purposes.

7.1.5. The original plans for the Correspondence Course Unit included supplementation by radio broadcasts. Unfortunately, no radio link has yet been established. It is still hoped, however, that it can be achieved. The Ministry of Education already has regular broadcasts to secondary schools and to teacher training colleges, and the Schools Broadcasts Department of the Ministry produces educational material for use with the radio programmes.

7.1.6. The University of Zambia has established a Department of Correspondence Education. Its first Director has, however, only just entered upon his duties. Its work is still in a preparatory and planning phase.

7.2. Experiences, Plans, and Problems of Zambian Correspondence Education

7.2.1. Zambia has already gained considerable experience in the field of education by correspondence. The foresight and imagination of the educational authorities in investigating the possibilities of correspondence instruction at a very early stage can serve as a model for educational development planning. Nevertheless, the problems of correspondence education in Zambia must still be given considerable attention.

The Correspondence Course Unit has not yet found its final form; it is in an important stage of development. The two-year period since its inception has been characterized by experiments in various directions, some of which have been successful, some not. Among the points of interest can be noted that the Zambian experiences have proved: a) that residential courses in combination with study by correspondence are not yet feasible in a Zambian context; and b) that free pacing should be allowed for Zambian correspondence students.

What the implications of this are for the rest of Central and Eastern Africa is an open question - it is not permissible to generalize from such comparatively limited material. However, the Zambian experiences should be borne in mind when any new African correspondence project is planned. Most correspondence educators would also agree, from their own experience that the principle of free pacing should be upheld. If allowance is not made for it, it will attempt to assert itself, as in Zambia, in the working realities of the scheme. The consequences are generally either that carefully prepared schedules have to be abandoned or that the drop-out rate is extremely high - which in its turn requires a student enrolment measured in five figure numbers to be economical.

7.2.2. The contributions of the Correspondence Course Unit in Zambia to correspondence education not only in Africa are especially impressive in view of the many difficulties that have had to be overcome.

The decision to set up the unit was taken in May 1964. The Unit had to begin operations in August the same year. This left two and a half months in which to write and produce the courses and to organize the work of the Unit from scratch.

No one assigned to the Unit had any previous knowledge or experience of education by correspondence. Even today, the Unit is operating very much on a trial and error basis. The majority of its solutions of routine problems are both feasible and elegant and compare very well with what has been done in other parts of the world. But it is in the nature of things, that some of its procedures need revision.

The continuity of the Unit´s work has been broken several times during the important phase of construction. The present Officer-in-charge is the third person to hold this post, and the Unit has moved from Lusaka to Luanshya.

The present situation at Luanshya, good as the premises are, are not ideal for a correspondence unit. The centre of a correspondence education programme is very dependent - particularly in a developing country, where communications sometimes are inadequate - on being close to the largest available source of prospective course writers and markers for the type of instruction it offers. The opportunities in this way are far better in Lusaka than in Luanshya. A possible radio link would also make a localization of the unit in Lusaka desirable. The University of Zambia, with its Department of Correspondence Education, being in Lusaka, this again seems to indicate that Lusaka is the better site for the Correspondence Course Unit.

7.2.3. The results of the first examination of students from the Correspondence Course Unit were less good than was expected at the planning stage. This can be ascribed to several contributing factors:

1. The correspondence courses first written were qualitatively not entirely satisfactory, particularly the courses in History, Mathematics and English.

2. The correspondence students were required to conform to a strict time-schedule of the "conventional" school timetable pattern.

3. The ability of many of the students to comprehend and express themselves in written English was not sufficient for the work required.

4. New lessons were sent to the students automatically every fortnight, instead of together with the marked assignments of a previous lesson sent in by the student.

Some of the possible solutions of these problems that suggest themselves are the re-writing of course material (which is already being done), the introduction of free pacing, the preparation of a remedial course in English, and the despatch of new material being geared to the student's factual rather than presumed progress (which has recently been done).

The enrolment has hitherto also been much too restricted, even for a pilot project. It has been based on conventional school estimates rather than on correspondence education imperatives. Instruction by correspondence being a means of mass education, results must, to be financially and otherwise significant, be based on experiments with preferably two to three thousand students or more. An absolute minimum is very likely 1000 to 1500.

7.2.4. The future planning of the Correspondence Education Unit must be directly influenced by the opening of a Department of Correspondence Education at the University of Zambia. It can be argued that the activities of the Unit and the Department are not necessarily interdependent, because they are concerned with education on different levels and with different categories of students. But in the Zambian context, this reasoning is not unreservedly valid.

The student margin which the University Department can count on for enrolments is very slender. The latest published Annual Report of the Ministry of Education in Zambia, for 1964, shows that a total number of 432 students qualified for the Zambia School Certificate (GCE, Ordinary Level), 31 for the Matriculation Certificate with four or more subjects, 4 for the full Cambridge Higher School Certificate, and 72 for the GCE, Advanced Level, in two or more subjects. Even given an appreciably accelerated output of secondary school leavers throughout the sixties, the University of Zambia and the Evelyn Hone College of Further Education can be expected to be capable of absorbing, during the next five to six years, practically all secondary school leavers with examination results qualifying them for tertiary or further education. The comparatively good possibilities of obtaining grants and bursaries for "conventional" academic studies in Zambia will also restrict the demand for correspondence courses at this level.

Consequently, the Department of Correspondence Education of the university may very well wish to offer courses also on the secondary level. Even without this development the Department would naturally be taking an interest in the correspondence programme on the immediate sub-university level.

Some form of close cooperation, perhaps even a merger, between the Correspondence Course Unit of the Ministry of Education and the University's Department of Correspondence Education thus seems inevitable and even desirable to an outside observer; it can be defended also for reasons of manpower and equipment economy.

7.3. Proposed Seminar on Correspondence Education - Recommendations

7.3.1. The interest in Zambia in the proposed seminar is very positive. The seminar could help in the work already going on by discussing and highlighting some of the problems facing Zambian correspondence education. Zambian experience and first-hand knowledge of education by correspondence would on the other hand be of great value to the proposed seminar.

7.3.2. It is therefore recommended that invitations be extended to the Ministry of Education, Lusaka, and to the University of Zambia to send the Ministry two and the University one participant to the proposed seminar on "The Use of Correspondence Instruction in Adult Education. Means, Methods and Possibilities."

The participants should preferably be Zambian nationals (not a condition) and should in their daily work be concerned with Zambian correspondence education for the next few years.

7.3.3. Some of the problems that it would be of value to Zambia to give special emphasis to at the seminar are:

1. The problems of using a second language as a medium of correspondence education. How is remedial language instruction best given by correspondence in a developing country?

2. Student selection procedures - aims, methods and comparative effectivity.

3. Course planning and writing.

4. The marking of student assignments - methods and effectivity.

5. The rôle of government correspondence education as opposed to commercial correspondence instruction. Policies, methods, and aims.

The general aim of the seminar should be to give an overall introduction to the methods and problems of correspondence education and illustrate how problems of correspondence education can be solved.

7.4. Aid to Correspondence Education in Zambia - Recommendations

7.4.1. Aid to correspondence education could be given and would be welcome in three forms:

1. A small consultant group of correspondence specialists, perhaps representing different nationalities or "approaches" to correspondence problems, could visit Zambia for a period of about a month in order to go through in detail the organization, objectives and routines of the Correspondence Course Unit. The group should in its report give definite recommendations regarding even routine details of the Unit. The blueprint thus prepared could be used by the Ministry in developing the Unit.

2. An expatriate correspondence education specialist could be assigned to the Ministry to help in the implementation of the Ministry's plans for correspondence education.

3. A regular one to two year training scheme for future correspondence educators should be started.

8. Uganda

8.1. Potential for Correspondence Education in Uganda

8.1.1. The educational situation in Uganda, although bearing fundamental resemblances to that in for instance Kenya and Tanzania, has some features that distinguish it from the conditions prevailing in the other countries dealt with in this report. The pre-requisites for education by correspondence (and the mass media) are, owing to these special features, probably better in Uganda than elsewhere in the region.

8.1.2. Uganda is estimated to have a comparatively high literacy rate. On an average 43 % of the population is literate. The literacy rate among the male population is even higher than this mean average.

8.1.3. The language question is, however, unusually complicated. Radio broadcasts are given in 18 languages, and even so, not all the vernaculars have their own programmes. Nilotic, Hamitic, and Bantu elements - and hybrids of these - are all represented in Uganda, and the position of Swahili is appreciably weaker than in both Kenya and Tanzania; it is to a much lesser degree the lingua franca of everyday life. Paradoxically though, major language difficulties have, however, not been without redeeming consequences. Teaching on the secondary and tertiary level through the medium of English is not considered to involve quite the same problem of language proficiency of students as in the other East African countries. The complex language situation has brought about a wide use of English, and a relatively larger amount of the population understands and/or speaks English than in the adjoining states.

8.1.4. In Uganda, too, the radio and television network is comparatively well developed, and physical communications are fairly good.

Almost half of the children of school age are absorbed into the primary school system, although a serious bottleneckexists on the secondary and subsequent levels; the Ugandan educational pyramid shows the same very pointed profile, with a disproportionately broad base, that can be found elsewhere in the region.

On the whole, the circumstances mentioned concur to make Uganda a country where correspondence education can be expected to succeed and also to be in demand.

8.2. Adult Education in Uganda - a Brief Outline

8.2.1. In Uganda as in the neighbouring countries, several institutions are engaged in adult education work. Voluntary organizations, such as the YMCA and the churches have a relatively long tradition in this field to fall back upon, and of the government agencies involved in adult education the ministries of Education, Community Development, Health, and Agriculture are the foremost. Specially directed towards adult education is the Extra-Mural Department of Makerere University College, the oldest of the university colleges constituting the University of East Africa. The Makerere Extra-Mural Department is the parent organization of the corresponding institutions in Kenya and Tanzania and dates from 1954.

8.2.2. Full-time residential courses of varying length are organized by the Extra-Mural Department of Makerere University College, which offers a special formal qualification for adult students: the Certificate of Adult Studies. This certificate can be taken by residential study at the Residential Centre of the Department or by attending evening classes. For the Certificate of Adult Studies, courses are provided in English; the Development of the Modern World (a special, composite subject); Political Science; Political Theory; and Economics,

One of the main aims of the Certificate is to provide a form of training and examination more relevant to the needs of the adult student than the GCE, which primarily prepares for university entrance.

The current annual number of applicants to the Certificate of Adult Education courses is about 500. At the latest enrolment, some 250 applicants sat for the selective entrance examination that is regularly administered for the course. 30 students were accepted. The annual student potential for the course is estimated by the Director of Extra-Mural Studies at 1000, but the applications - and the intake - are restricted by the fact that the available resources only allow the course to be offered in a few places.

8.2.3. Other forms of adult education are represented by the teacher training colleges (at present being reorganized), and the Institute of Education, which is engaged in research and in-service training.

The overall structure of adult education in Uganda is, however, now being overhauled, and reforms or changes of both an administrative and educational nature seem imminent.

8.3. Educational Problems and Needs in Uganda

8.3.1. In Uganda, just as in other Eastern and Central African states, there is a marked imbalance between the development of educational facilities at the primary and other basic levels and at the upper primary ,secondary and tertiary levels. A discrepancy can also be observed between the manpower development needs of the country and the type of education to which school-goers are directed or drawn. In this respect Uganda's situation can be said to be characterized in a general way, by the pervading needs and problems set forth in chapter 2 of this report.

The chief bottlenecks of education in Uganda are in secondary education, teacher training, vocational,and technical training.

8.3.2.1. A major concern of the Ugandan educational authorities is that only a relatively small percentage of the secondary school students complete the Secondary Course. One of the reasons for this can be sought in the limited capacity of the secondary schools to absorb primary school leavers; teachers and teaching facilities are only sufficient to provide places for less than a third of the prospective students.

But perhaps the gravest deterrent to an expansion of the secondary school system is the current very high drop-out rate among secondary school students. Although admittedly too restricted, the secondary school system would have a much more direct impact on the country's social and economic development, if the drop-outs could be prevented.

Some 40000 - 50000 students are lost annually to the school system.

Perhaps one of the explanations for drop-outs on the secondary level is the poor quality of the primary education these students have received. This would imply that an increase in the efficiency and productivity of the secondary schools would best be achieved by a radical renewal of the teaching methods and an improvement of the general standards of the primary schools.

Again, it can be argued that other factors contribute just as considerably towards increasing the drop-out rate, for instance the students' inability to afford school fees, or inadequate teaching methods on the secondary level.

8.3.2.2. Very few educational alternatives are open to these drop-outs, and not least in the fields of vocational and technical training are the opportunities limited.

8.3.2.3. The whole question of education for this group of potentially very valuable middle range manpower is highly complicated. For while it is self-evident that some means of training the secondary school drop-outs outside the regular school system would give the country a larger development capacity, it must be remembered that the economy may not at present be able to absorb a greatly expanded output of "academically" trained secondary school leavers. There is a risk - politically and economically dangerous - of augmenting the numbers of unemployed primary school leavers with unemployed groups of youth with further education. Any training programme by means of for instance correspondence would therefore require a very careful analysis of what technical, vocational and innovational skills development in the early 1970's presupposes. High literacy ability and knowledge by themselves are not necessarily conducive to economic growth in a modern, developing African society. The productive skills that are needed are probably very often other than an "academic" education trains.

8.3.3. The teaching standards in schools are uneven, owing to the presence of teachers whose training has been insufficient. These relatively numerous groups of sub-standard teachers (about 6000) need some form of supplementary training not only in teaching methods; their basic education must be strengthened, if the curriculum is to be reformed. The upgrading of primary teachers, for instance in English, Mathematics and General Science, must therefore have high priority in Uganda.

8.4. Correspondence Education in Uganda - Experiences and Plans

8.4.1.1. In Uganda, no large-scale project using correspondence instruction has been carried out by the authorities. However, in 1965 an experimental course in adult education by correspondence and television was conducted by the Extra-Mural Department of Makerere University College on the subject of "Good Letter Writing".

The background of the experiment was recommendations made in January 1965 by a conference held in Lusaka, Zambia, on "Mass Media in the Education of Adults". At the conference examples were given from USA and Britain of the use of coordinated courses for adult education, involving combinations of ETV, radio, correspondence education, residential courses, etc.

Television in Uganda reaches about 70% of the country and is being successively expanded. The choice of ETV in connection with correspondence instruction was therefore natural. The course was to be as far as possible self-financing, and an enrolment fee of five shillings was decided upon.

8.4.1.2. The reactions to the course were not encouraging. Only two people enrolled individually for the correspondence course, and as a consequence of this, (viewing) groups had to be organized at the last minute. Eventually 71 people enrolled for the course, 45 of whom sent in exercises, and 21 completed the course. The participants were sent questionnaires, which showed that the students were mainly teachers and clerks or government officials. One third of the students had either not watched any of the programmes or had stopped doing so. Most of them had to travel some miles to get to a TV set. Subsequent surveys showed that those of the correspondence students who did watch the TV programmes achieved better results than those who did not.

8.4.1.3. The choice of subject for this experiment does not seem to have been fortunate. The incentive to follow a course on letter-writing can not generally be expected to be strong; the average adult student is attracted to a training that is geared to specific objectives rather than to one which is more vague and the practical use of which is not immediately felt to be very great. Then too, the set-owners in Uganda are still the relatively well-educated and well-situated, for whom the need for further education, especially in letter-writing, does not seem imperative.

8.4.1.4. Some of the conclusions drawn by the Extra-Mural Department on the basis of the experiment are:

> 1. The spread of TV sets is at present inadequate in Uganda from an educational point of view. It will be a long time before the potential correspondence student owns his own set. Group viewing in public places is a necessary prerequisite to the widespread use of ETV.
>
> 2. Close links would have to be established between different government ministries to make the planning and implementing of ETV/correspondence programmes effective.

8.4.2. Uganda is seriously considering the establishment of a national correspondence education scheme. In March 1965, Uganda was visited by a team of US experts. The team, which was sent out by US AID, consisted of L.H. Adolfson, Chancellor, University Center System, W.G. Harley, President, National Association of Broadcasters, and H.B. McCarty, Professor-Director of Radio-Television Education. Its proposals for educational improvements in Uganda through expanded use of radio, television, and correspondence instruction are, at the time of writing of this report, being studied by the Ministry of Education, Kampala.

The report of the AID team has priority-listed the educational needs of Uganda for which special ETV/radio/correspondence programmes could be developed, in the following way:

> "1. In-service training, especially in English, for primary teachers.
>
> 2. Direct instruction for primary school students, especially in English and the sciences.
>
> 3. Instruction for primary school leavers in:
>   a) traditional study for Cambridge examinations,
>   b) vocational and agricultural training, and
>   c) general citizenship training.
>
> 4. Direct instruction to the secondary schools and teacher training colleges, especially in science.
>
> 5. University-parallel instruction on first and/or second year levels.
>
> 6. Adult education in both formal and informal fields."

The team recommends the creation of a comprehensive National Education Communications Centre to meet these needs. The Centre "...will provide a co-ordinating agency and a central technical facility for the rapid development of additional educational services through radio, television and correspondence instruction. The Centre would work in and through all interested educational agencies and institutions which would be directly invoked in the operation of the Center and draw upon it for technical support and service".

The setting up of a Policy Board for the Centre is recommended. It would comprise representatives of the Ministry of Education, Makerere University College, the Institute of Education, the National College of Education, the Uganda Technical College, the Uganda Teachers Association, and the Public at large. The Centre should be established in the Ministry of Education and work on the development of combined educational programmes for ETV, radio and correspondence instruction.

8.5. Proposed Seminar on Correspondence Education - Recommendations

8.5.1. The Ministry of Education and Makerere University College are both very interested in the proposed seminar on "The Use of Correspondence Instruction in Adult Education. Means, Methods, and Possibilities." It would, as has been shown, agree very well with what already has been discussed and attempted, if a basic training seminar were held, which would introduce the participants to the fundamental aims and methods of correspondence instruction.

8.5.2. It is therefore suggested that the Ministry of Education and Makerere University College (Extra-Mural Department) be invited to send one participant each to the proposed seminar. The participants should preferably be Ugandan nationals and have a first hand knowledge of adult education and/or secondary school education and teacher training in Uganda. They should be expected to work in the near future with some national correspondence education project in Uganda.

8.5.3. The proposed seminar should particularly stress the following questions of importance to Uganda:

1. The rôle of ETV, radio and residential courses in combination with correspondence education. Problems, objectives and methods.
2. Correspondence instruction for teacher training.
3. Supervised correspondence instruction.

8.6. Possible Aid Projects

8.6.1. As has already been mentioned, Uganda is at present considering recommendations made by a US AID team. It is still too early for the Ministry to indicate its line of action. A very detailed, comprehensive and carefully prepared report on a possible aid project already having been prepared, the question of aid will not be entered upon here at any length.

It is only suggested that the possibility of offering the Certificate of Adult Studies by correspondence be investigated, perhaps as a limited pilot project. If initially successful, the correspondence programme could be enlarged to include subjects like Accountancy, Book-keeping, managerial type subjects and subjects for small tradesmen. A pilot project within this field would help to develop an important sector of adult education and be of service to Uganda.

9. General Recommendations

9.1. It is recommended that the proposed seminar, "The Use of Correspondence Instruction in Adult Education. Means, Methods, and Possibilities", be held for participants from the visited countries Ethiopia, Kenya, Tanzania, Malawi, Zambia, and Uganda, the number of participants from each country, and their qualifications, being as proposed for each separate country in this report. An invitation to send one participant should also be extended to the Ministry of Education, Mogadishu, Somalia.

9.2. The seminar should be held in 1967 at such a time and place as the Foundation should see fit, perhaps during the latter part of the (European) summer.

9.3. The language of the seminar should be English.

9.4. "Teaching by Correspondence", by Miss Renée Erdos (published by UNESCO) should be used as a basic handbook at the seminar and be sent out to the participants well in advance of the seminar. Special material kits should be prepared for use at the seminar.

9.5. The possibility of producing a handbook on the basis of the course should be investigated.

9.6. One week of study visits to adult education institutions and correspondence education centres should be part of the seminar. The study visits should be carefully prepared and be followed up by seminar work.

10. Summary of Report

10.1. Introduction

10.1.1. Correspondence education is a teaching method that combines self-study with regular, two-way, individual communication between student and teacher. Correspondence education is a vehicle of mass education. It relies on the use for self-study of self-instructional material, i.e. material so constructed that learning is facilitated by the methodical application of modern educational and psychological principles and theories. There are two kinds of correspondence course: the self-contained course, and the study guide, which is based on textbooks. Group study by correspondence is a combination of teaching by correspondence and the study-circle or group-study method.

10.1.2. Correspondence instruction presupposes a relatively well developed infrastructure. Originally most used in sparsely populated parts of the world, it can now be regarded as one of the educational tools of a society in transition; it allows the student to adapt himself to change by learning new skills and acquiring new knowledge while remaining on his job.

Correspondence education in Africa is today mainly based abroad and is generally not geared to development needs. In contrast to this, it should be indigenous and must actively assist in reducing manpower shortages by offering in service training opportunities to specific, middle level manpower groups of vital importance for development. The educational pyramid of the countries with which this report is concerned, reveal a great potential need for a relatively economical form of mass education such as correspondence instruction (supplemented by radio, group-study, a system of itinerant tutors, or residential courses, depending on what the circumstances allow). The African educational pyramid has often a broad base of (surplus) under-qualified manpower and a sharply narrowing apex of qualified manpower, of which there is a great shortage. A system of mass education, drawing on the surplus reserve of less qualified manpower for further training could restore the balance.

10.1.3. Correspondence tuition

a) allows a close link between education and the work of everyday life

b) is a comparatively economical form of mass education

c) allows free pacing

d) allows individualization

e) can, if courses are competently prepared, be a highly effective form of instruction

f) develops nation-building and leadership qualities

g) makes swift curriculum reforms possible.

10.1.4. On the other hand, correspondence instruction is "difficult" and demands a lot of the students. It also puts the verbally non-gifted at a disadvantage, and is often lacking in the human element. Laborative subjects and languages are not taught as effectively by correspondence as by other, "conventional" means.

10.1.5. Correspondence instruction requires:

a) fairly good communications

b) a relatively high level of student language proficiency

c) a tolerably good home environment for the student

d) qualified course writers and markers

e) facilities for the technical production of courses

f) recognition

g) planning to avoid drop-outs and to keep the student´s incentive to study on a high level.

10.2. General Educational Needs in Eastern and Central Africa

10.2.1. The pattern of education is still in most of the countries dealt with in this report that which was introduced by the European colonial powers. A radical Africanization is called for, not only of educational content. The teaching must be better linked to the African student's everyday life. A tendency to overemphasize the importance of white-collar jobs must be combated, and many professional and specialized training courses, at present not offered in most of the countries, must be made available. Correspondence education could help remedy these deficiencies.

10.2.2. The rigid examination systems make learning for transition difficult, they stress too much the importance of knowledge for its own sake. The modern problem of the obsolescence of knowledge has made such an attitude outdated and dangerous. Correspondence education can train the student's ability to work on his own and can develop the study skills and study habits that are a pre-requisite for life-long learning.

10.2.3. Literacy training schemes generally have little or no follow-up. The lapse into illiteracy is consequently probably very great. A simple, very unsophisticated form of "correspondence course" would provide a feed-back follow-up that would make possible a constant check on the progress of newly literates.

10.2.4. Teacher training and especially teacher upgrading are of paramount importance. Supplementary teacher upgrading can very well be done by correspondence.

10.2.5. Activity methods in teaching are still far from common in the area dealt with in this report. The use of correspondence courses in "conventional" class-room situations would probably mean the introduction of more effective teaching methods than those currently being used.

10.2.6. Unemployed primary school leavers constitute a major educational, political, social, and economic problem. A mass education of this group of surplus manpower to fill acute shortages of skilled manpower would perhaps be one solution to this problem. This implies the use of correspondence instruction as one of the most proven and economical vehicles of mass education at present available.

10.3. Ethiopia

10.3.1. Practically all correspondence instruction hitherto offered in Ethiopia has been of foreign origin. The Extension Department of Haile Sellassie I University has, however, experimented with education by correspondence in collaboration with the Ministry of Public Health.

10.3.2. Adult education in Ethiopia is chiefly the responsibility of the Ministry of Education, the Ministry of Community Development and Labour, the Extension Department of Haile Sellassie I University, the Ministry of Public Health; there is also a considerable, largely uncontrolled night and evening school activity.

There is a demand for courses leading from Grade VIII to Grade XII (School Leaving Certificate) among two important groups: teachers and health workers.

10.3.3. Correspondence education could be used to provide upgrading facilities for health workers and teachers, on the secondary school level. In rural districts, these two categories today have no opportunity to advance themselves in their leisure time, and where for instance nurses are concerned, there are relatively few opportunities even in towns. Shift duty makes regular attendance at for instance night schools impossible for nurses and other health workers. Correspondence education for these two categories would make recruitment of qualified personnel easier, besides contributing directly towards the improvement of an essential middle-level manpower group.

On a lower level, there is a need for correspondence instruction in Pediatrics for dressers attached to the Ethio-Swedish Pediatric Clinic in Addis Ababa. These dressers are stationed in outlying districts, where they very often are the only persons with any kind of medical training.

Post-secondary correspondence courses in for instance Sociology, Social Science, and Rural Development would be useful for community development workers.

The development of follow-up material for newly literates according to modern educational principles could be undertaken by a correspondence instruction unit.

10.3.4. Major deterrents to correspondence education in Ethiopia are:

a) The inadequate postal service and road network. There do, however, exist communication systems of an "unofficial" nature through which it is possible to reach fairly regularly specific groups of people.

b) Language difficulties - English and often even Amharic is a second language.

c) Dearth of potential correspondence course writers.

10.3.5. There is a particularly strong interest in correspondence education at the Extension Department of Haile Sellassie I University, which is planning a pilot project involving instruction by correspondence.

10.3.6. The proposed seminar on correspondence education would be of value to Ethiopia. To it should be invited representatives of the Ministry of Education; the Extension Department, Haile Sellassie I University; and the Ministry of National Community Development and Labour. If the Ministry of Public Health also wishes to send a participant, it should be invited to do so. Problems that should be discussed at the seminar are, from an Ethiopian point of view: the problems of using a second language as a vehicle of instruction; the maintenance of student interest; and the training of correspondence course writers and teachers.

10.3.7. The proposed seminar would need some follow-up activity in Ethiopia in the form of a pilot project to be of immediate value to the country.

Such a pilot project should be aimed at upgrading primarily teachers and health workers from Grade XIII to Grade XII (School Leaving Certificate). A correspondence unit should be set up at the Extension Department of Haile Sellassie I University but must act as a national service unit to all ministries and organizations. The pilot project should last for five years and aid be given to Ethiopia in the form of a) expatriate specialists, and b) the capital and equipment necessary for running a correspondence project. Most of the running costs should be covered by student fees.

A postal library service should be linked with the correspondence education project, which as experiments also should run a course in Pediatrics for the Dressers of the Ethio-Swedish Pediatric Clinic and some simple "follow-up" correspondence courses for the literacy organizations.

The correspondence unit should aid Ethiopian literacy work by printing follow-up material for the literacy organizations and offering pedagogical advice on the construction of such material.

Even a limited success in any one of these areas, "regular" correspondence work, library work, or production of follow-up material, would mean that the correspondence unit had made a significant contribution towards educational development in Ethiopia.

10.4. Kenya

10.4.1. Attempts to use correspondence education have already been made in Kenya by the Extra-Mural Department, University College, and the College of Social Studies. A course run by the Extra-Mural Department in Economics combining correspondence education, ETV and face-to-face sessions proved successful and indicated great potential possibilities in Kenya for this method of instruction. An attempt by the College of Social Studies to use American university courses has shown that there is a demand for diploma courses by correspondence, but also that Kenyan correspondence courses, written in the country, would have to be developed.

The Ministry of Education is planning to use correspondence instruction for upgrading P3 teachers to Form II level. The question of supervised correspondence instruction in Harambee schools has also been raised within the Ministry, but for the time being no action in this direction is being contemplated.

Acting on the report of a specialist team sent out from USA, Kenya has decided to set up a correspondence centre, with US aid. A special Institute of Adult Studies has been created by University College and will consist of a resident centre (formerly the College of Social Studies, Kikuyu), an Extra-Mural Department, and a Correspondence Unit. The unit is to serve all interested ministries and organizations.

Nairobi is the centre of a large commercial correspondence school with branches throughout East Africa.

10.4.2. There is a very positive interest in Kenya in the proposed seminar. It is therefore recommended that the Ministry of Education be invited to send one participant, and the Institute of Adult Education three participants to the seminar. Problems that should be given prominence at the seminar are: the question of remedial language teaching; free pacing or not; the rôle of radio and ETV in connection with correspondence instruction; programming and correspondence instruction; the economics of education by correspondence.

10.4.3. Correspondence education could be used for upgrading students from the Kenya Science Teachers College. It is recommended that two science lecturers be seconded from the University of Uppsala to University College, to produce the necessary science courses and serve as a link between the University College and KSTC.

10.4.4. The Kenyan correspondence education programme should be backed up by the appointment of a programming expert to University College, Nairobi, to train Kenyan educationists in programming techniques. The question of financial aid to the project should be discussed with Kenyan authorities.

10.5. Tanzania

10.5.1. The Cooperative Education Centre, Moshi, at present is running the only non-commercial correspondence programme in Tanzania. The CEC has more than 1200 students and is aiming at training the staff of cooperative primary societies and committee members. The correspondence courses are written in both an English and a Swahili version. Student fees are minimal and cover marking costs only.

Some 7000 Tanzanian residents are enrolled with the leading commercial correspondence college. No national plan makes provision for correspondence education in Tanzania in the near future, although it is part of the People's Education Plan.

10.5.2. Conditions for a correspondence project in Tanzania are that it must: actively help in the implementation of the Five Year Plan; augment the work already being done by existing institutions; depend entirely on outside aid; be multi-purpose; use a multiple approach; be indigenous; be unacademic; be based on national surveys of manpower needs and popular demand; print its own material.

10.5.3. Education, and particularly Adult Education, is given high priority in Tanzania. Concentrated efforts are being directed towards Secondary Education; other problem areas are teacher training and upgrading, and the further training of unemployed primary school leavers.

10.5.4. The overall responsibility for adult education in Tanzania rests with the Ministry of Community Development and National Culture. There is a National Advisory Committee on Adult Education. Adult education students are recruited chiefly from literacy classes and the large group of primary school leavers. The chief adult education institutions are the Institute of Adult Education and Kivukoni College. The IAE provides part-time and full-time courses and depends on a system of resident tutors in the country. Kivukoni College is residential and offers courses of the leadership and citizenship type. It trains TANU and NUTA officials, teachers and members of the civil service. It has strong popular support.

10.5.5.- 5.6. The organizations active in adult education are very interested in the seminar. The following institutions should be invited to send one representative each, provided that there is a follow-up pilot project to the seminar: the Ministry of Community Development and National Culture, the Ministry of Education, the Institute of Adult Education, Kivukoni College and the Cooperative Education Centre.

Special attention should at the seminar be given to: group study by correspondence; correspondence instruction in combination with residential courses and/or radio; correspondence education and follow-up for newly literates; the rôle of District Training Centres in a Tanzanian correspondence instruction scheme; correspondence instruction for teacher training and teacher upgrading; correspondence instruction priorities and policies in a developing country.

10.5.7. The establishment of a correspondence education pilot project is recommended. It should be aimed chiefly at primary school leavers, and the courses should be centred on the life and needs of an agrarian community. The correspondence courses should to a very large extent supplement the courses at present given by the Institute of Adult Education and Kivukoni College. There should be a radio link, a postal library service expressly for the correspondence students, and "follow-up correspondence courses" should be produced for newly literates.

The correspondence organization should either be attached to Kivukoni College or the Institute of Adult Education; or be a separate unit, under the Tanganyika Education Trust Fund.

10.6. Malawi

10.6.1. Malawi has had a correspondence college under the Ministry of Education since 1965. Some 2600 students are now enrolled. The activities of the college also comprise a postal library service, and a daily radio programme during school terms. Most of the recognized night schools in Malawi have also been placed under the College, which offers courses for the Primary Leaving Certificate, Junior Certificate, General Certificate of Education and City and Guilds Intermediate Examination.

The college takes student fees, which cover most of the running costs. The initial outlay for capital equipment and the salaries of the expatriate staff, has been supplied by New Zealand and Australia, and US AID has assigned several Peace Corps Volunteers to the college.

The radio programmes augment the correspondence courses and give some of the background which many of the students otherwise lack. They are considered by the college to be of not inconsiderable importance for student motivation.

In order to improve the standard of English and provide library facilities for a more extensive reading, the college has relatively recently started a postal library service which relies on inexpensive paperbacks.

Night school students comprise 600 - 800 of the college's total number of students. Some of the night schools base their instruction directly on the correspondence lessons of the college, whereas the teaching of a few is independent of the lessons.

10.6.2. Malawi is very much interested in the proposed seminar, and it would also increase the value of the seminar to have participants from an African country with first-hand experience and knowledge of correspondence education in an African context. It is therefore recommended that Malawi be invited to send two participants to the seminar.

10.7. Zambia

10.7.1. As early as in 1964, a Correspondence Course Unit was established by the Ministry of Education, Lusaka. It provides Juniory Secondary level courses and has at present about 500 students. Of the 1964 first intake of 150 students, 41 completed the course.

The students were originally strictly paced,and provision was made for residential courses to be integrated with the correspondence studies. Both these measures have now had to be discontinued for practical reasons.

The cost of running the Unit is still high; the student´s fee is £ 8.0.0., whereas the correspondence programme costs the Ministry roughly £ 26.10.0. per student and year.

There is at present no formal link with radio or with a library service.

10.7.2. The Correspondence Course Unit has had considerable difficulties to face. It was set up by education officers without any previous knowledge of correspondence education; the courses had to be written and the organization established in less than three months. The continuity of the Unit´s work has been broken several times: the present Officer-in-Change is the third person to hold this post in two years, and the Unit has moved from Lusaka to Luanshya on the Copper Belt.

The present situation at Luanshya is not ideal. The opportunities for engaging course writers and markers are much better in Lusaka, where the Unit also would be nearer to the University of Zambia and its Department of Correspondence Education. The establishment of a radio link in the future would also make Lusaka a better site for the Unit than Luanshya.

Course writing has been and still is a major problem of the Unit; several of the courses have had to be rewritten.

A close cooperation between the Correspondence Course Unit and the Department of Correspondence Education at the University of Zambia seems inevitable.

10.7.3. The Zambian interest in the proposed seminar is positive. It is therefore recommended that the Ministry of Education be invited to send two, and the University of Zambia one participant to the seminar.

Some of the problems that it would be of value for Zambia to have discussed are:

a) The problems of using a second language as a medium of written instruction

b) Student selection procedures

c) Course planning and writing

d) The marking of students' assignments

e) The rôle of government correspondence education as opposed to commercial correspondence education.

10.7.4. Aid to Zambia in the field of correspondence instruction could be given in three forms:

a) A small group of consultants could study the aims, organization and methods of the Unit and give definite recommendations regarding future development.

b) An expatriate correspondence education specialist could be assigned to the Ministry to help in the implementation of the Ministry's plans for correspondence instruction

c) A regular training scheme for future correspondence educators should be organized.

10.8. Uganda

10.8.1. The pre-requisites for correspondence instruction in Uganda are comparatively good: a fairly high literacy rate; less difficulties involved, when English is used as a medium of instruction, than in the adjacent countries; relatively good communications.

10.8.2. Adult education work is done by voluntary organizations, several ministries, and the Extra-Mural Department and Residential Centre of Makerere University College. A special Certificate of Adult Studies is offered by the Extra-Mural Department. The annual number of applicants to the course leading up to this certificate is about 500.

10.8.3. Main educational problems in Uganda are secondary education, teacher training, and vocational training. There is a very high drop-out rate among secondary school students. About 40000 - 50000 are lost annually to the school system. The teaching standards in the schools are uneven, as many of the teachers are admittedly unqualified or underqualified.

10.8.4. An experiment with a correspondence course in "Good Letter Writing" combined with ETV has been carried out by the Extra-Mural Department of Makerere University College. The response was not very encouraging, although viewing groups were organized and 21 people completed the course. The experiment has shown among other things that the spread of television sets is too small at present for a really effective use of ETV. Only a relatively small, well-educated group of the community can be reached in this way.

A recent development is that Uganda has been visited by an American team of specialists, whose report the Ugandan government is at present studying. The use of correspondence instruction/ETV/radio is envisaged to provide in-service training for teachers, direct instruction for primary school students, instruction for primary school leavers, direct instruction to the secondary schools and teacher training colleges, university-parallel instruction on first and/or second year levels, and adult education.

10.8.5. Both the Ministry of Education and Makerere University College are interested in participating in the proposed seminar and should be invited to send one participant each. From the Ugandan point of view it would be of value, if the seminar gave prominence to the following: the rôle of ETV, radio and residential courses in combination with correspondence education; correspondence instruction for teacher training; supervised correspondence instruction.

Appendix 1

This report is based on information and suggestions obtained through interviews and conferences with representatives of many organizations and from material prepared by some of these organizations.

Interviews and Conferences

UNESCO. Paris.

Mr. A.Kh. Kinany,	Acting Director, Operational Services
Mr. F.L. Bartels	

Organization for African Unity (OAU), Addis Ababa

Mr. Joshua D Buliro,	Assistant Secretary General

Economic Commission for Africa (ECA), Addis Ababa

Mr. J. Edocpayi,	Chief of Training Section, Liason Officer with UNESCO

Ethiopia

Ministry of Education, and Fine Arts, Addis Ababa

Ato Haile Yesus Abeye,	Director General of Primary and Adult Education

Haile Sellassie I University, Addis Ababa

Dr. Solomon Inquai,	Dean of University Extension

Ministry of National Community Development and Labour, Addis Ababa

Ato Aberra Moltot,	Director General of Community Development

Ministry of Public Health, Addis Ababa

Ato Haile Yesus Sebsibie,	Assistant Minister, Chief of Health Education and Training

Ethio-Swedish Pediatric Clinic, Addis Ababa

Prof. Yngve Larsson,	Head

Ethio-Swedish Institute of Building Technology, Addis Ababa

Mr. G. Wadman,	Principal

Representatives of the National Literacy Campaign Organization and the Yemrisrach Dimts Literacy Campaign

Kenya

Ministry of Education, Nairobi

Mr. Jeremiah Nyagah,	Minister of Education
Mr. Kyale Mwendwa,	Chief Education Officer
Mr. W.A. Frankish,	Deputy Chief Education Officer

University College, Nairobi

Dr. Arthur Porter,	Principal
Dr. D.P. Wasawo,	Deputy Principal

Institute of Adult Studies, Nairobi

Mr. Paul Fordham,	Director

Institute of Education, Nairobi

Mr. Peter King,	Principal

Department of Education, University College, Nairobi

Prof. O.K. Buros
Prof. H. Morrison

Extra-Mural Department, University College, Nairobi

Mr. R.C. Prosser,	Director

College of Social Studies, Kikuyu

Mr. Paul Fordham,	Principal

Kenya Institute of Administration, Kabete

Mr. J. Kariuki,	Principal

Kenya Science Teachers College, Nairobi

Dr. Olov Bergman,	Principal

Kenyatta College, Nairobi

Mr. W. Evans,	Deputy Principal

Ministry of Agriculture, Nairobi

Mr. R.E. Sands

Literacy Centre of Kenya

Mr J.J. Dames,	Principal

Tanzania

H.E. Mr. Rashidi Kawawa	Second Vice-President

Ministry of Education, Dar es Salaam

Mr. J. Sawe,	Chief Education Officer

Ministry of Community Development and National Culture, Dar es Salaam

Mr. J. Mchauru,	Principal Secretary
Mr. J.M. Rutashobya,	Adult Education Organizer

Institute of Adult Education, Dar es Salaam

Mr. Paul Bertelsen,	Director
Mrs. Dorothy Thomas,	Senior Resident Tutor
Mr. David Crowley,	Resident Tutor, Moshi

Kivukoni College, Dar es Salaam

Mr. Griffiths Cunningham,	Principal
Miss Belle Harris,	Tutor
Mr. O.G. Thomas,	Tutor

Tanganyika Education Trust Fund, Dar es Salaam

Miss Joan Wicken,	Secretary, Personal Assistant to H.H. the President of Tanzania

Ministry of Agriculture, Dar es Salaam

Mr. G. Palmer,	Training Section

Cooperative Education Centre, Moshi

Mr. Arne Holmberg	Principal

Ministry of Commerce and Co-operatives, Dar es Salaam

Mr. U Nyi Nyi,	Co-operative Expert, International Labour Office

Zambia

Ministry of Education, Lusaka

Mr. D. Bowa,	Acting Permanent Secretary
Dr. J.H. Skellon,	Adviser, Further Education
Mr. D. Grose,	Senior Adult Education Officer
Mr. P. Delahunty,	Head, Educational Broadcasting Section

University of Zambia, Lusaka

Miss Lalage Bown,	Director of Extra-Mural Studies
Mr. Max Hopper,	Director of Correspondence Courses

Correspondence Course Unit, Ministry of Education, Luanshya

Mr. G. Cockburn,	Officer-in-charge

Zambia Library Service

Mr. M.W. Parr,	Librarian

Evelyn Hone College of Further Education, Lusaka

Mr. Hans Noak	Department of Extra-Mural Studies

Malawi

Ministry of Education, Zomba

Mr. R.T.M. Wareham,	Permanent Secretary

Malawi Correspondence College, Ministry of Education, Blantyre (Limbe)

Mr. E.A. Kaye,	Principal

Uganda

Ministry of Education, Kampala

Mr. W. Rwetsiba,	Permanent Secretary

Makerere University College, Kampala

Prof, G. Bager,	Deputy Principal

Extra-Mural Department, Makerere University College, Kampala

Dr. A.T.C. Slee,	Ag. Director (also Director, Adult Studies Centre)

National Institute of Education, Makerere University College, Kampala

Mr. Senteza Kajubi,	Director

Appendix 2

(The expenses for expatriate staff indicated in this appendix are based on the total outlay for a family with three children: salary; travelling expenses; increments for overseas duty, children, housing; medical care and insurances, etc.)

A ETHIOPIA

Estimated costs for project outlined in 3.7.

1. Capital Equipment

5 Typewriters (3 electric)	ca. Sw.kr.	9 000
2 Dictaphones	" "	2 600
1 Photocopying machine	" "	1 000
1 Book-keeping machine	" "	8 000
5 Filing cabinets	" "	7 000
1 Student record filing table with student record cards	" "	600
Office furniture, stationery, etc.	" "	12 000
TOTAL	ca. Sw.kr.	40 200

2. Running costs per Annum over a Five-year Period

a)	Course production (authors fees, printing, etc.)	ca. Sw.kr.	130 000
	Stationery, travel, and incidentals	" "	20 000
b)	1 Correspondence education specialist	" "	100 000
	1 Correspondence administration specialist	" "	100 000
	1 Course editor	" "	92 000
	1 Secretary/typist	" "	89 000
	TOTAL	ca. Sw.kr.	531 000

The cost of a postal library service is elastic. It would depend very much on the extent of the activity, and the minimum amount of books considered necessary for the service to be reasonably effective. This would require a special survey on the basis of final plans for the correspondence courses.

Marking costs, postage, etc., would have to be met by students' fees. Supernumerary staff salaries and office rents would be met by the Extension Department of Haile Sellassie I University from funds allocated for this purpose. After the initial five-year period, when a stock of courses and equipment will have been built up, the correspondence unit could be expected to be self-supporting.

B TANZANIA

Estimated costs for project outlined in 5.7.

1. Capital Equipment

5 Typewriters (3 electric)	ca.	Sw.kr.	9 000
2 Dictaphones	"	"	2 600
1 Photocopying machine	"	"	1 000
1 Book-keeping machine	"	"	8 000
1 Student record filing table with student record cards	"	"	600
Office furniture, stationery, etc.	"	"	12 000
Printing equipment	"	"	450 000
TOTAL	ca.	Sw.kr.	483 200

2. Running Costs per Annum over a Ten-year Period

a)	Course production (authors´ fees, paper, etc.	ca.	Sw.kr	75 000
	Stationery, travel, and incidentals	"	"	20 000
	Office rental and administrative overheads	"	"	40 000
b)	1 Correspondence education specialist	"	"	100 000
	1 Correspondence administration specialist	"	"	100 000
	1 Course editor	"	"	92 000
	1 Secretary/typist	"	"	89 000
	Tanzanian staff	"	"	125 000
	TOTAL	ca.	Sw.kr.	641 000

The cost of a postal library service depends partly on whether a link can be established with the Tanganyika Library Service. If a separate postal service has to be instituted for the correspondence unit, this would call for a librarian (who, just as the course editor and secretary/typist could be a Peace Corps Volunteer), and an outlay for a sufficient stock of books.

Marking costs, postage, etc., would have to be met by students´ fees.

Appendix 3

People on our staff who attend night school

Sex:	Male	Female	Total
	25	13	38

Ages:	Under 20	20 - 25	26 - 30	Over 30
	1	21	13	3

Marital status:	Married	Single	Widowed	Divorced
	16	19	-	3

Educational before starting work:

Elementary school

Grade	II	III	IV	V	VI	VII	VIII
	5	3	2	2	1	2	12

	Secondary school			Priest school	Night school
Grade	IX	X	XI	1	1
	1	3	1		

Year of Graduation:

1945	1946	1951	1952	1954	1955	1956	1958	1959	1960	1961	1962	1963	1964	1965
1	1	2	1	1	1	1	6	2	2	5	3	1	2	1

Reasons for leaving school:

Financial problems	11
To join a course	7
Wanted to get a job	4
Because of marriage	4
Because of bad health	2
Failed the 8th grade	1
Was ordered to join navy	1

Present position in this clinic:

Elementary dresser	5
Adv. Dresser	8
Staff nurse	0
Any other	25

Reasons for joining night school:

To continue education and gain more knowledge	19
To improve	11
To get a better living and position	5
To improve his English	1
To be able to read and write	1
To help himself and his country	1

Time since night school was started:

Under 1 yr.	1 yr.	2 yrs.	3 yrs.	4 yrs.	5 yrs.	6 yrs.	7 yrs.
7	10	11	4	4	1	-	1

Present Grade:

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII
5	5	2	2	4	3	2	1	5	6	4	1

Commercial Sch. 1st Yr.
1

Future Plans:

Would like to reach grade:	IV	V	VI	VII	VIII	IX	XII
	1	1	3	1	4	1	18

Up to College
8

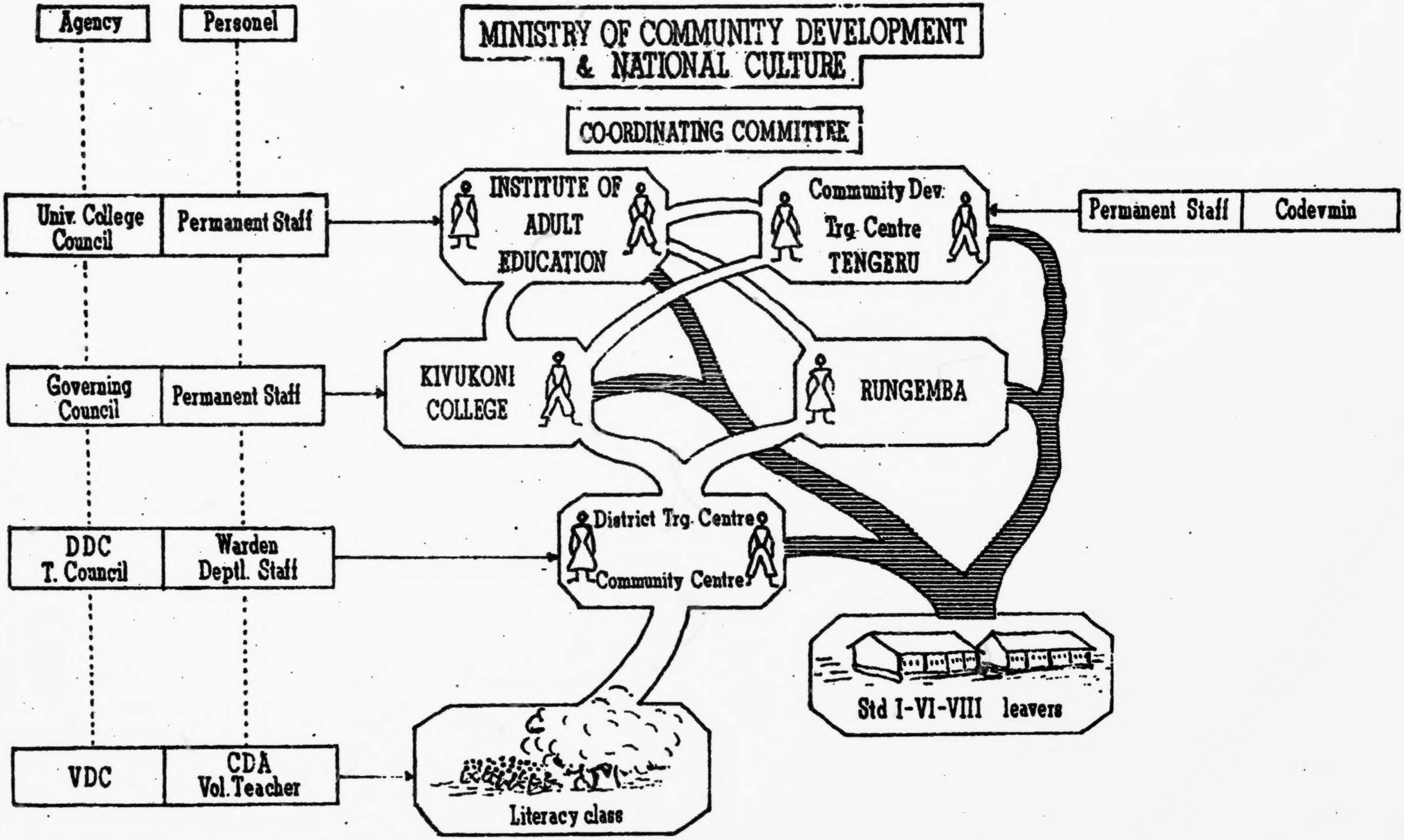
Not yet decided 1

Plans after finishing night school:

Not yet decided	15
To be a health officer	6
nurse	4
dresser	3
adv. dresser	1
midwife	1
pharmacist	1
secretary	2
accountant	1
Keep same job as now	1
To join college	1
To get a better position	2

APPENDIX 4

ORGANISATION CHART - ADULT EDUCATION - TANZANIA



Appendix 5

RADIO CLASSROOM

THE RADIO PROGRAMME OF THE MALAWI CORRESPONDENCE COLLEGE

SCHEDULE FOR TERM TWO, 1966

Mondays and Thursdays

4.15 Exploration and the Slave Trade (Junior Certificate History)

16/19 May	Sea Travel in Mediaeval Times
23/26	Bartholomew Remembers
30 May/2 June	Cortez and Montezuma
6/9 June	The Slave Trade
13/16	The Spanish Armada
20/23	The Great Triangle
27/30	The Middle Passage
11/14 July	The Anti-Slavery Campaign
18/21	Mungo Park
25/28	David Livingstone

4.30 Say What You Mean (English Composition for G.C.E.)

16/19 May	Selecting a Topic
23/26	The Right Word
30 May/2 June	Describing Things
6/9 June	Beginning and Ending
13/16	How to Write a Descriptive Essay
20/23	Telling a Story
27/30	Explaining Things
11/14 July	Arguing a Point
18/21	Other Types of Essay
25/28	That Final Polish

4.45 The People of The Book (The Story of the Hebrew Nation, from Abraham, to the time of the Judges)

16/19 May	Abraham's Call
23/26	Jacob and Esau
30 May/2 June	Jacob and his Children
6/9 June	Joseph in Egypt
13/16	Moses and the Burning Bush
20/23	The Exodus
27/30	In the Wilderness
11/14 July	The Promised Land
18/21	The Conquest of Canaan
25/28	The Beginning of a Nation

Tuesdays and Fridays

4.15 Stories from Many Lands (Practice in Enlish Comprehension for Junior Certificate)

17/20 May	When the Sun Went Down
24/27	The Orderly
31 May/3 June	The Chameleon
7/10 June	A Cup of Tea
14/17	Zire Buzette
21/24	The Hoop
28 June/1 July	The Beast
12/15 July	The Stub-book
19/22	The Accursed House
26/29	One or the Other

4.30 Mitu ya Zokambirana (Current affairs for Primary Certificate students, broadcast in Nyanja and Tumbuka)

	Nyanja		Tumbuka
17/20 May	Boma lathu	24/27 May	Boma lithu
31 May/3 June	Maiko Ozungulira Malawi	7/10 June	Vyaru Vyakupakana na Malawi
14/17	Atsogoleri a mu Africa	21/24	Barongozgi Ba Africa
28 June/1 July	Bungwe la Maiko ogwirizana (United Nations)	12/15 July	Wumba wa Vyaru Vyakukoleranako (United Nations)
19/22 July	Atsogoleri a Maiko a kunja kwa Africa	26/29	Baraongozgi Ba Vyaru vya Kuwaro Kwa Africa

4.45 What is Science? (A general introduction to Science: suitable for J.C. candidates in all science subjects)

17/20 May	What Science is about
24/27	Matter and Energy
31/3 June	Force
7/10 June	Gravity
14/17	The Earth We Live On
21/24	Cycles in Nature
28 June/1 July	Plants
12/15 July	Animals
19/22	The Food We Eat
26/29	How Science Helps Us Conquer Disease.

Note that there will be special study-sheets to accompany this series. You should make use of them to obtain full benefit from the programmes.

Wednesdays

4.15 Midweek Magazine - including 'Science in the News', music appreciation and current affairs sections.

4.45 Great Moments in Science (Background studies in Science: Upper J.C. and G.C.E. levels)

18 May	Pasteur and the Microbes
25	Priestley and Oxygen
1 June	Lavoisier and the Nature of Burning

8	Faraday and the Dynamo
15	Becquerel and the Mysterious Rays
22	Marie Curie Discovers Radium

Gulliver's Travels

29 June - 27 July A dramatized version of this famous story, told in 4 parts.

THE LIBRARY OF
OCT 6 1967
CONTINUING EDUCATION